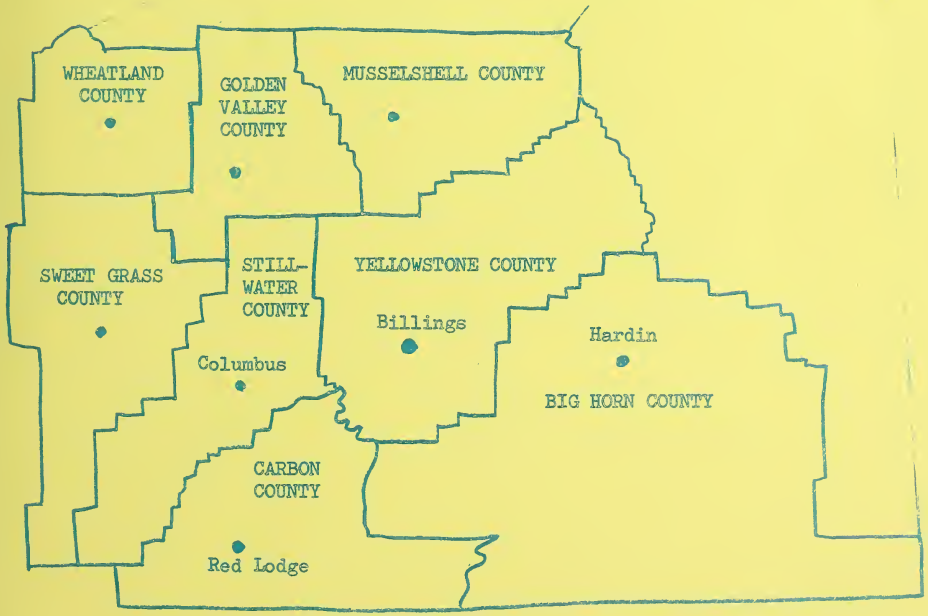
Exploration & Experimentation of Methods of Sharing Educational Services with Patients & Families



DISTRICT 6 HEALTH CARE LEARNING CENTER
REGION

EXPLORATION AND EXPERIMENTATION OF METHODS OF SHARING EDUCATIONAL SERVICES WITH PATIENTS AND FAMILIES

United States Public Health Service
Department of Health Resources Administration

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Beatrice H. Kaasch, R.N., M.P.H.
Project Coordinator

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INTRODUCTION AND BACKGROUND

A need for patient and family education had been well documented in the literature by the beginning of this decade. Hospital staff development committees recognized very early that overlaps existed in patient teaching, but, in fact, were more concerned about the lack of coordination, the haphazard approaches, and the gaps in patient learning.

In 1971, St. Vincent's Hospital in Billings, Montana, had been assigned as a primary learning center by the Montana Hospital Association. In addition, the large auditorium and classroom space in the School of Nursing building were frequently utilized for State-wide group meetings initiated by both official and voluntary health agencies. Representatives of Federal Government from Washington, D.C., as well as Region VIII, Denver Headquarters, attended sessions in the area. In late 1971, following a scheduled health conference, Mr. Stanley Rosenberg, Health Facilities Division, Bureau of Health Resources Administration, was invited to discuss approaches to patient education with the Hospital Administrator, the Division Department Heads, the nursing staff members, and the physician Director of Continuing Medical Education.

He returned in May of 1972 and was joined by representatives of the Health Education Bureau of the State Department of Health to discuss organization of a patient education committee and to explore activities. Following his presentations at the Governor's Conference on Health Education in Helena in April of 1973, he met again with the Patient Education Committee to review progress. In addition, Miss Ruth F. Richards served as consultant at meetings of hospital pharmacists and administrators exploring unit dosage, which were held in three locations in Montana. She, too, met a number of key staff members in Billings.

Over a period of time, staff of the Health Facilities Division became aware of the interest and concern for patient education in this medical and hospital center which serves South Central Montana and the Big Horn Basin of Northern Wyoming.

When the board members of the Society of Professional Health Educators met early in 1974, the Chief of the Bureau of Health Education of the Montana State Department of Health and Environmental Sciences was asked about the possibility of a demonstration project to explore sharing of a health educator between urban and rural hospitals in a sparsely settled region. The feasibility of utilization of a staff person in this manner appeared to have potential for a number of other areas across the Country.

In late June of 1974, Dr. Harold Granning, then Assistant Surgeon General, notified the Montana State Department of Health and Environmental Sciences that funding was available for a contract to demonstrate sharing of health education services between urban hospitals in a rural state. At least

two areas in Montana were known to D.H.E.W. to be involved in limited patient education programs. In addition, the Health Facilities Division further sought to determine if sharing could also be accomplished with a small rural hospital in a sparsely settled region.

State Health Department staff approached the areawide Comprehensive Health Planning Agency personnel to verify interest and feasibility. It was decided to designate hospitals in District 6 Health Care Learning Center region as the most likely site to make application for funds to carry on a project. It is one of seven district centers of the Montana Hospital Association, which had just applied to become incorporated as a Health Care Learning Center and was seeking to employ a Coordinator. Funding for the Learning Center was contributed by nine hospitals in the eight-county area and by both Mountain States and Intermountain Regional Medical Programs. The focus of the Learning Center would be to maximize educational resources for inservice education to staffs of both urban and rural hospitals and, hopefully, to additional health facilities, including nursing homes and medical clinics.

Administrators of Billings' Deaconess and St. Vincent's Hospitals in Billings were enthusiastic about the prospect of sharing a health educator for patient and family education. Historically, the hospitals, each of 200 bed capacity, have shared and combined services in order to conserve the patients' dollars and offer the community a broader scope of services. The medical community, which consists of about 90% specialists, largely board certified, practices in both institutions. Billings' Deaconess has open-heart surgery and psychiatry, whereas St. Vincent's offers maternity services including high-risk perinatal care and a 24-hour/7-day emergency department with full-time physician coverage. A separate corporation was formed to allow building and sharing of a laundry and, in addition, printing services have also been combined. Educational programs related to specific disease areas were initiated in both institutions, but generally not duplicated. Billings' Deaconess has a Cancer Assist Team; St. Vincent's offers a diabetic patient and family teaching clinic; an Enterostomal Therapist employed by St. Vincent's consults with patients in both institutions; and a Sister of Charity Oncology Nurse Clinician offers family counseling to families and patients from both hospitals.

The area of the Region is 17,848 square miles -- larger than the combined states of Massachusetts, Connecticut and Rhode Island (13,737) and only slightly smaller than Vermont and New Hampshire (18,334). The 1970 census shows a population of 119,310 (more than half of which live in the City of Billings - 61,581 41970)). It is an area of growth, demonstrated by the fact that the 1975 estimated population of the Billings metropolitan area is 83,500. Yellowstone County has 2,642 square miles with a 1975 population estimate of 96,000.

A proposal for Exploration and Experimentation of Methods of Sharing Educational Services for Patients and Families was submitted and a cost reimbursement contract awarded. The Administrator of the Montana Division of Hospital and Medical Facilities and the Chief of the Bureau of Health Education were named as Project Co-Directors. The Project Officer was Miss

Ruth F. Richards, and upon her retirement, she was replaced by Miss Evelyn Starks of the Division of Health Facilities Development, Bureau of Health Planning and Resources Development, Health Resources Administration.

The purpose of the contract was to share services of an educator among three hospitals to encourage the sharing process in geographic areas where small urban and small rural hospitals exist. The educator would develop the program, staff the patient education committee, help the staff in hospitals learn "how to teach," assist with the construction of and purchase of materials, and assist with the evaluation of the program. Objectives as set forth in the contract included:

-- To work in District 6 Health Care Learning Center with St. Vincent's Hospital; Billings' Deaconess Hospital; one other hospital; and the possibility of other small rural hospitals in the six counties surrounding the Billings area in setting up a shared patient education service.

-- To employ the following steps in the patient education service: Gain administrative support; organize patient education committee (multidisciplinary team); assess patient needs; identify teaching objectives, program content, staff responsibility; determine educational methods; develop teaching materials; plan staff inservice education related to patient education; commence patient education program; and evaluate patient's responses.

-- To evaluate the program.

-- To meet with the Project Officer as often as deemed necessary to evaluate the progress of the contract and remedy deficiencies as identified.

-- To furnish the Project Officer a final report containing methods developed regarding the exploration and experimentation of sharing educational services for patients and families.

STAFF

On August 1, 1974, the Coordinator was employed. She had an M.P.H. in Health Education and had been, at one time, a health education consultant for the Montana State Department of Health. She had experiences in clinical nursing, administration in both nursing service and nursing education, and most recently was on assignment as an assistant professor of Community Health Nursing in the School of Nursing on the Billings Extended Campus of Montana State University. Another plus factor was familiarity with the community and acquaintance with nursing and administration staffs of both urban hospitals and the medical community. Past employment in Helena and in Butte, and being a native Montanan who was actively involved in professional organizations and with civic and health agencies permitted immediate involvement in activities of identifying needs and exploring methods.

Initially, secretarial and telephone services were shared with the Coordinator of District 6 Health Care Learning Center. Adjoining offices for the two projects had been contributed by St. Vincent's Hospital in Marillac

Hall at no cost to the Project. Incidentally, the two urban hospitals are located within a three block area and are surrounded by office buildings housing a large proportion of the medical staff. As activities increased, it became obvious that a full-time secretary with skills in preparation of visual aids was essential.

CONSULTING COMMITTEE

Key health and education people in the area were invited to serve as a Consulting Committee. These included administrative assistants of the Montana Hospital Association and of Blue Cross of Montana, Director of Continuing Medical Education who serves both hospitals, the City-County Health Officer, and independent Nurse Practitioner, Pharmacist, Executive of the areawide Comprehensive Health Planning Council, Nutritionist, Psychologist, and an audiovisual specialist from Eastern Montana College, the Area Supervisory Nurse from Indian Health, a nursing home administrator, and supervisor of the Senior Citizens Center. The Health Care Learning Center appointed two representatives, both hospital administrators. One was from Stillwater County and the other from the U.S. Public Health Service Crow Agency Hospital in Big Horn County. Later, a representative of a low-income group was added.

A number of staff development and inservice personnel in the area were closely associated with the Project and served as peer group consultants, as did the Coordinators of the District 6 Health Care Learning Center and of Continuing Nursing Education for Montana State University.

Four meetings of the entire Committee were held during the two years of the Project. Project Co-Directors or their assigned representatives attended and Project Officers attended the second (November, 1974) and the last (April, 1976) sessions. In September of 1975, the Bureau Chief of the Region VIII Office of the Division of Health Resources and a consultant from the same division of the Communicable Disease Center in Atlanta, Georgia, met with the group during a workshop on equipment safety. These Committee meetings were planned to coincide with the scheduled visits of the D.H.E.W. Agency personnel into the region.

At the initial meeting of the Consulting Committee, the group explored the potential for meeting the objectives of the Contract, and it was determined that the needs of patient and family education were so great that priorities would need to be established in order to explore in depth and to develop effective methods. In fact, one representative indicated that one could easily open a "Pandora's Box" if we tried to respond to all of the identified needs for patient and family learning. At this point, the rationale was established to determine priority for programs to be shared by the urban hospitals and in the rural area.

The Coordinator had met with the Directors of Nursing Service and the Inservice personnel from both urban hospitals to identify ongoing programs and to seek those which logically could be shared most effectively. Many informal contacts were made with physicians in the area to explore potential programs and to identify goals. Upon the advice of Consulting Committee members, it was determined that diabetic patient education had been carried

on at St. Vincent's and that teaching the patient about open-heart surgery was being done through the Billings Clinic and Billings' Deaconess Hospital, therefore the Project should consider the needs of patients who were admitted to both urban institutions. It was then decided that the logical project for sharing would be the patient having a myocardial infarction and members of the family.

SHARING HEALTH EDUCATION SERVICES FOR THE MYOCARDIAL INFARCTION PATIENT AND THE FAMILY

Affirmative support was obtained immediately from Nursing Service Directors and Nurse Clinicians of both urban hospitals. In view of the fact that a number of patients from the region are transferred or later admitted with complications of coronary attack to both urban hospitals, the Staff Development and Inservice Staff agreed to set priority for this program, anticipating that it had potential for sharing in the rural area.

Multidisciplinary Team

The focus of the Nurse Specialist in the Coronary-Intensive Care Unit of Billings' Deaconess Hospital on teaching in the areas of angina, pre-infarction, and myocardial infarction revealed the need for a more organized learning program to meet the patient and family needs. She and the Nurse Clinician from St. Vincent's jointly taught coronary care classes to staff nurses in the area. The realization of the goal for patient teaching was frustrated by the usual lack of time excuses and the reluctance on the part of many staff nurses to become involved because of insufficient experiences in teaching adults. Further need was identified for positive feedback to determine if the patient and family learned to deal with the required changes in lifestyle and to successfully control the risk factors so as not to become a statistic in a repeat coronary.

Search of the literature and surveys of myocardial infarction programs in hospitals of comparable size led her to begin to organize a multidisciplinary team to identify the needs, determine objectives for teaching, and establish a teaching protocol which would fit the local situation.

The M.I. Multidisciplinary Team consisted of the Nurse Specialist, who served as chairman; two cardiologists who are the major consultants in both C.I.C.U. departments in Billings; representatives from pharmacy and dietary; the Physical Therapy, Cardio-Pulmonary, and Social Service Department Heads; the Head Nurse in C.I.C.U.; and the Head Nurses or Staff Nurses from the primary nursing and medical floors. The Nurse Specialist from the Psychiatric Division was a consultant. The group had met together several times before the sharing Project was organized, and the Project Coordinator was invited to participate.

The coronary care units are combined with other medical, surgical intensive care in both hospitals and have non-segregated nursing staffs. Patients admitted to these divisions are seen on a consultant basis by either of the two cardiologists. In addition, a patient in need of care may be admitted from Emergency Services to either coronary unit depending upon a vacant

monitored bed. Furthermore, the patient who had care in one hospital may be admitted to the other the next time he has need. For these reasons, it was logical to combine the planning teams from both institutions and to develop a single teaching protocol.

Assessing Patient/Family Needs and Writing Objectives

The Team's objectives were to identify patient and family learning needs to develop a tool, to implement use of that tool, and to evaluate the effectiveness of the teaching protocol. Initially, from the rap sessions about patient and family learning needs, the objectives were stated as terminal behaviors which could be evaluated to demonstrate learning or need for reinforcement. The objectives were detailed for two reaons: First to serve to remind staff members of the scope of patient's learning needs in both C.I.C.U. and on the medical divisions; and secondly, to substantiate the need for a lengthy tool.

Physicians, head and staff nurses, dietitians, physical and respiratory therapists, and pharmacists contributed individually and in groups to identification of objectives, content, and suggestions for effective approaches to patient teaching. They determined a need for pertinent information about the patient and his family and included demographical data, the significant other family members, critical items of patient's history, and special problems. The current diagnosis (since both institutions use the problem oriented medical records system) and medical orders for diet, activity, and medications would also be essential. Initially, the Nurse Specialist at Billings' Deaconess and the Nurse Clinician at St. Vincent's requested to be identified on the protocol as the Teaching Coordinators.

The Team stressed certain essentials prior to teaching either the family or the patient. These included determination of the readiness to learn, feedback to assess level of understanding about the condition, reassessment of needs for information and support by conferences and sharing information with team members, and to verify the physician's revelations to the patient and family. A year later, the procedure was simplified by the medical staff's adoption of a cardiac teaching patient prescription which designates specific learning areas.

Content of the Patient Teaching Tool

The tool was divided into logical sections beginning with the I.C.U. experience. Space was provided for recording of date and time and teacher; evaluation of need for reinforcement by comment; and a check of the final review of learning in the boxes opposite the terminal behavior. As an example, the following Key Area from the Protocol is identified in detail. In the columns used to assess the learning, a code identifies the patient as P and the partner or family member as Pn. NA is used for not applicable and a check mark (✓) means affirmative achievement and it is initialed by the person who verifies the learned behavior.

TO BE LEARNED; PATIENT AND FAMILY WILL DEMONSTRATE UNDERSTANDING BY:	Date, Time Achieved. Teacher's Name, Title.	Needs further reinforcement. Comment.	Final Review of Learning.
I.C.U. EXPERIENCE:			
1. Verbally reviewing and demonstrating where applicable: the bed is controlled by the nurse; the monitor shows heart patterns; visiting is limited to 5-10 min., 1-2 family members only, at 8 a.m. 11 a.m. 2 p.m. 5 p.m. 7 p.m.; and call bell system.			
2. Physician's Orders: Verbally reviewing: the elastic hose, I.V. and its slow infusion, need to report pain, type of medications, type of diet and reason for being on it, tests that will be done, frequency and why, intake and output, and O_2.			
3. Demonstrating exercise regime to prevent venous stasis while in bed and reasons why the knee gatch will not be raised; activity booklet exercises.			
4. Verbally reviewing the physician's new orders before discharge from ICU.			
5. Verbally reviewing the ward nursing care regime, use of the bed and call system, activity level after ICU discharge, and re-evaluation of diet and reasons for diet.			

The remainder of the tool adheres to the above format and outlines details of knowledge and understanding with appropriate behaviors in the following areas:

KNOWLEDGE OF CONDITION
- Heart action - physiology of circulation
- Risk factors
- Pre-infarction syndrome

HEART ATTACK
- What it is
- Symptoms
- Healing
- Notify physician/go to E.R.

ANGINA
- Causes
- Symptoms
- Action and effect of nitroglycerin

PREVENTIVE MEASURES
- Reducing stress
- Diet
- Cigarette smoking
- Activity
- Job
- Sexual activity
- Home factors related to discharge
- Medications

Cardiac Education Prescription

Pre-printed on DOCTOR'S ORDER SHEET and identical in both hospitals:

If you wish to have patient and family participate in the Patient/Family Myocardial Infarction Program, please check the following:
Diagnosis: ☐ Angina; ☐ Pre-Infarction Syndrome; ☐ Myocardial Infarction

Patient and Family need to know about:

- ☐ mechanism of heart attack and healing
- ☐ symptom recognition and prevention
- ☐ diet
- ☐ discharge medication teaching
- ☐ need to quit smoking
- ☐ principles of physical activity
- ☐ may return for educational purposes as an outpatient.

If you do not wish to have your patient participate in the Myocardial Patient/Family Teaching Program, check here: ☐

Anticipated further length of stay:

Date: Sign:

Staff Responsibility

Concurrently, most of the Multidisciplinary Team were involved members of the Yellowstone County Heart Association, and a number of internists were also active members. A two-pronged project aimed at prevention and community education was selected as the program of the year. The emphasis on prevention of coronary artery disease with focus on risk factors was closely related to the in-hospital M.I. Teaching Program. Members of the Team proposed a tool to involve the community participants and developed the "Instead of a Heart Attack" questionnaire to accompany the slide presentation which focused on

prevalence of coronary artery disease and the precipitating risk factors. The Nurse Specialist from Billings' Deaconess was chairman of the Association that year. She assembled most of the content to accompany the slides which were prepared by the local School District. Many hospital and community nurses participated in the scheduled presentations to civic club meetings and community groups, especially to parent-teacher organizations. An internist on the Heart Association Board initiated a "Run for your Life" activity program at the Y.M.C.A. to benefit patients and family members who were at risk. The Coordinator of the Patient and Family Education Project discovered that frequent committee meetings and individual conferences were an effective and appropriate way to become acquainted with those involved in education of the heart patients.

The cardiologists suggested that the Protocol be tested with their patients and with those for whom they were consultants. In the meantime, the Team met with individual physicians on a one-to-one basis to talk about our goals and patient needs. After the three month trial, the medical staff accepted the Protocol without question and it was initiated in the C.I.C.U. by attachment to the patient's chart along with the doctor's order sheet.

The Nurse Specialist and Clinician initiated teaching in the Coronary Care Units and coordinated the patient's learning needs on the nursing divisions to which patients were transferred. The need for teaching tools was met by materials from the Heart Association, diet booklets and posters, plus medication fact sheets prepared by the pharmacists.

While we were reviewing materials, the Director of Continuing Medical Education (an internist member of the Project's Consulting Committee) made a recommendation to preview a series of six audio cassette tapes, "Post Coronary Patient Education," developed at the University of Washington in Seattle under the direction of Robert M. Levenson, M.D., and distributed by Pfarrago Information Systems. Evaluations were positive and a need was expressed for similar material; therefore, instead of developing something comparable, sets were purchased by the Project and placed in each hospital.

The cassettes provide the post coronary patient with basic information about a heart attack, its causes, contributing factors, symptoms, post coronary care, exercise and return to normal activities. One of the tapes is on sexual activity, a topic which is not often discussed. They have been used with patients and family members separately and together. They serve to identify attitudes and biases, initiate questions, secure feedback, determine areas for further exploration and support, as well as to help the patient and family feel more comfortable in identifying and meeting their learning needs.

Development of Educational Materials

The educational approach was based on a concept that the incidence of a myocardial infarction is viewed by the patient and his family members as a sudden loss of function, loss of control of activities, and is accompanied by physical, emotional, and social changes. Although the responses of individuals vary, generally the behaviors indicate stages of grief and mourning. Early

recognition of the emotional impact of the perception of loss was an essential guideline to help the staff deal effectively with the patients' and families' responses. In the Coronary Care Unit the warm, understanding, caring attitude of support and acceptance was the key to beginning assessment of what the patient and family would need to know and would benefit from learning, but because of emotional stress, the amount of learning was limited to simple directions and supportive measures.

The lack of medical school environment with the absence of a teaching-learning millieu of other disciplines was a recognized constraint to developing skills of personnel. Continuing nursing education in the area is generally related to updating knowledge based on scientific research, to the effective use of new equipment, and the rationale for skills required by a complicated procedure. The majority of nurses working in the Units had not fully incorporated into their practice the skills of interviewing and general assessment. They were generally not accustomed to taking pertinent nursing history from the psychological and social viewpoint in order to verify readiness to learn and to deal with both patient's and family's coping mechanisms.

The health educator developed a bibliography of materials that were available in the nursing libraries of both hospitals and prepared a summary which focused on assessment to determine the patient's and family's response to hospitalization and to identify and utilize effective approaches to the common methods of coping, i.e., fear and anxiety, anger, hostility, agression, denial, depression, and dependency.

Another problem which was identified early in the program was unfamiliarity with effective teaching methods related to adult learners. The idea of health workers' telling the patient what it is assumed that he needs to know, further complicated by lack of time for teaching and the frustrations of a busy unit or ward, was a limitation which nurse clinicians found to be stressful.

The Montana State University program in Continuing Nursing Education offered the first of a series of four workshops in January, 1975, on the teaching-learning process, with a focus on adult education. Head and staff nurses from both hospitals in Billings and hospitals and health agencies in surrounding counties participated. Interim projects and consultations with the Coordinator of the University Program allowed first hand experiences in organized teaching and learning continuum with the opportunity to practice teaching and learning techniques with both staff as well as patients and families. Ten nurses from St. Vincent's and Billings Deaconess attended the second series offered in the fall of 1975. This demonstrates a commitment of nurses to the need for learning how to teach and to become better qualified to carry out the function of helping patients and families to learn.

However, for a number of reasons, not all myocardial infarction patients were placed on the teaching program immediately.

Interim Evaluation

During the summer, the Nurse Specialist at Billings' Deaconess reviewed

M.I. teaching as documented on the patients' charts between February 17 and May 17, 1975. The findings included:

- Patients admitted with diagnosis of chest pain to I.C.U. = 67.
- Diagnosis of M.I. was made on 24 (or 35.82%)-- Males = 19; Females = 5.
- Number on M.I. Teaching Program = 15 (62.5%).

Telephone calls at one month and/or a public health nursing visit within one week of discharge of these 15 revealed:

Public health nursing visit - - - - - - - - - - - - - 6

Patients living out of county (no PHN) - - - - - - - 5

Health Department not notified - - - - - - - - - - - 2

Patient requested no visitation - - - - - - - - - - - 1

Patient died - 1

Documentation on patient's chart and/or interview indicated:

- Dietary information specifically understood - - - - 5 of 15
- Quit smoking - 5 of 15
- Y.M.C.A. "Run for your Life" Activity Program (probably) - - - - - - - - - - - - - - - - - - 3 of 15

In September, 1975, when the study was discussed by the Consulting Committee and staff, several pertinent factors were identified:

- Patient and family anxiety level was very high in C.I.C.U.; therefore, limited learning is achieved. Furthermore, need for improved preparation for C.I.C.U. discharge was identified.
- Early orders for education would allow time for learning and behavioral changes; therefore, the early adoption and utilization of M.I. Teaching Prescription order would enhance the program.
- Involvement of staff nurses to provide for continuity of learning after C.I.C.U. discharge is essential to meet needs of all myocardial infarction patients and families.
- A routine for referral to newly organized home health program of the City-County Public Health Department Nursing Service must be developed and there is need to explore available resources for follow-up for those patients residing outside of the County in the rural areas.
- A mechanism must be found for expansion of the teaching to all myocardial infarction patients and families.

Another review of patients admitted to Billings' Deaconess Hospital's C.I.C.U. during one month of the summer was done to study the time lapse from initial pain to hospitalization of those patients diagnosed as having had a coronary. The results indicated that the time lapse was:

0 - 12 hours = 23%

after 3 days = 44%

after 4 days = 33%

These factors indicated the need for more community education, but very specifically spelled out the vital need for patient and family understanding about the importance of prompt response to symptoms. We did not have definitive information about the number of patients who have had a repeat coronary in this area, but over the Country, these facts are well documented.

The C.I.C.U. Nurse Specialist and Clinician are responsible for Staff Development and have specific obligations for the care of critically ill patients. In spite of their interest and commitment to patient teaching, these nurses found that being totally responsible for its coordination was overwhelming. By late summer of 1975, they had decided that more staff would need to be involved in the entire project. Those staff nurses who had participated in the M.S.U. Continuing Nursing Education teaching-learning workshop wished to be more involved, but if someone else had assumed leadership of the teaching, it was possible for them to withdraw and allow the press of other duties to make it easy to avoid the practice. Staff nurses were encouraged to participate as coordinators for myocardial infarction patient and family teaching. However, consideration to other patient care needs was reflected in the priority which was granted to patient teaching in their system of values.

At Billings' Deaconess, several recently employed B.S.N. graduates of the M.S.U. Nursing Class of 1975, whose basic education had included a sharp focus on patient teaching, volunteered to become involved in the teaching protocol both in C.I.C.U. and on the medical divisions. The Nurse Specialist working with them on a one-to-one basis and as a group helped them to focus on assessment of the patient's teachable moment and to follow through on the program with the patient and family.

In August, the Nurse Clinician at St. Vincent's began to plan for a workshop on the teaching-learning process to upgrade skills of staff nurses in order to involve them with the protocol. However, even before the date was fixed for mid-September, she resigned her position to further her own educational plans.

The time lapse between assignment and orientation of a new person delayed the progress of the myocardial infarction teaching program. Although she was committed to patient and family learning, her basic nursing preparation was limited in both educational methodology and community health nursing. However, the staff nurse who was assigned as Nurse Clinician was currently enrolled in the M.S.U. Teaching-Learning Process workshops. She decided that her project for the course credit could be to develop and implement a workshop to aid the St. Vincent's nurses to better prepare themselves for involvement with the Myocardial Infarction Protocol.

Plan for Staff Development at St. Vincent's

The Project Coordinator and the new Nurse Clinician began planning in

November. Contacts were made with physicians and nursing service personnel at all levels to identify resources and establish needs and to explore areas of concern with patients and family members. It was decided to prepare terminal objectives to allow participants to evaluate their own learning progress and to actively involve themselves in learning by using adult education methods. The program of the day was planned according to these objectives and time was allotted for each one on the agenda. The Staff Development Coordinator of Nursing Service scheduled two separate day-long sessions five days apart. Key supervisors; head nurses; staff of medical divisions, as well as C.I.C.U., and two L.P.N.'s who were regularly scheduled in the Intensive Care Unit were invited to attend. Arrangements for attendance on duty time were incorporated into the monthly master schedule. Materials were prepared on nursing assessment, therapeutic responses, and coping mechanisms. These were placed in a binder and distributed a week in advance of the date to all participants. Also included were copies of the Myocardial Infarction Teaching Protocol, the Patient Learning Objectives, and the following goals and objectives for the workshops:

GOAL: THAT THE C.I.C.U. STAFF NURSES, SUPERVISORY AND DIVISION STAFF NURSES BE ACTIVELY INVOLVED IN MYOCARDIAL INFARCTION TEACHING IN ORDER TO PROVIDE CONTINUITY FOR BOTH PATIENT/FAMILY AND STAFF.

Commitment to the above goal is based upon:

1. Belief that every patient with Myocardial Infarction and the family are candidates for learning.
2. Appropriate approaches are used by all nurses to assure patient/family are taught/have learned.
3. Continuity of teaching follows patient from C.I.C.U. to Nursing Division, to home.
4. Focus on knowledge/skills/technics of the patient/family learning program to help patient make necessary changes to cope with living.

PROGRAM ON TEACHING MYOCARDIAL INFARCTION PATIENTS/FAMILIES ON DECEMBER 11th and 16th, 1975, WILL FOCUS ON HELPING PARTICIPANTS TO:

1. Identify obstacles/problem areas with Myocardial Infarction Teaching Protocol;
2. Identify positive results of teaching myocardial infarction patients and their families using force field model;
3. State three characteristics of the adult learner and four strengths of a good teacher;
4. Verbalize concepts of teaching and learning;
5. Assess priority needs for learning and implement plan of action; participate in assessment/observation experiences;
6. Actively use communication skills therapeutically;
7. Listen to and critique patient-nurse interview;

8. Become consciously aware of beliefs/values/convictions regarding patient education;

9. Practice a values clarification exercise;

10. Identify coping mechanisms of the myocardial infarction patient and his family;

11. Use effective approaches in dealing with patient on the Myocardial Infarction Teaching Protocol;

12. Identify positive actions in implementing the Myocardial Infarction Teaching Program;

13. Verbalize ways to communicate patient and family needs for learning to clinician, dietitian, pharmacist, public health nurse, and other appropriate agencies and/or staff;

14. Plan for patient discharge; refer patients to Public Health Nursing;

15. Identify actions found to be positive in helping the myocardial infarction patient and family with adult learning needs to cope with problem areas in achieving changes needed for the highest possible level of patient/family wellness.

Participants in the workshops were immediately involved in the learning process. Using a force field model, each of them silently wrote obstacles to and positive results of myocardial infarction patient/family learning. These were then shared to create a common bond for learning to deal with their own problems. Blank newsprint was used to record their contributions and the comments generated by the discussion. These sheets were posted on the wall for easy referral.

They also took part in observational, communication, and values continuum exercises. There were no lectures. Content was introduced briefly and active discussion evolved from individual and small group input, critique of demonstrations, and a role play of appropriate responses to the patient's coping mechanism, followed by group exploration of other effective approaches. A number of posters had been prepared to provide instant feedback related to program activities.

Discussion with a panel composed of the Nurse Clinician, staff nurse, pharmacist, dietitian, and a City-County public health nurse revealed a problem area of communication with key people when a patient is placed on the Protocol. A mechanism for referral of diet questions and results of laboratory tests to the dietitian was explored. Nurses volunteered to reinforce learning about medication and to explore the patient's and family's understanding of drugs, both prescription and over-the-counter. The staff of C.I.C.U. and medical divisions agreed to communicate more detail about how far the patient had progressed on the Protocol and they identified gaps or barriers to learning when patients were transferred. The participants recommended further use of the Protocol to verify needs of patients/families at change of shift reports as a means to provide for continuity of teaching and learning for both patient and family. C.I.C.U. staff agreed to assist with patient teaching

follow-up. During visits to patients on the other divisions, they could initiate feedback to substantiate learning and communicate patient's misconceptions and needs for support and reinforcement. A procedure to notify the home health agencies of the patient's hospital discharge was explored. On a trial basis, it was decided to attach the Teaching Protocol to the discharge summary sheet for public health nursing follow-up.

To introduce each learning objective, take-home materials were distributed for notation and placement into the study manuals. We included characteristics of adult learners and superior conditions for adult learning; interviewing techniques, communication skills, values clarification based on Sidney Simon's concept; the Patients' Bill of Rights, emphasizing the right to education and information; and a statement of the seven legal functions of nursing practice enunciated by Milton J. Lesnik and Bernice Anderson.

The workshops were held on two days of heavy winter snowstorms, yet the attendance was excellent. Everyone scheduled, except for three of the supervisors who had last minute conflicting assignments, attended the sessions. The format of the sessions required that all participants be present for input and involvement in the learning process. Meetings started a little late because of inferior driving conditions and parking problems.

The evaluations of the workshops were highly positive. The great majority of the 32 nurses expressed a specific commitment for positive action to improve patient and family learning. They appreciated the handout materials for their own reference manuals. They felt more knowledgeable about ways to incorporate the patient's need for learning into plans of care. It was suggested that the tools for helping patients to learn be made more visible for all staff, and they wanted back-up support and feedback of their initial teaching encounters by either the nurse clinician or other nurses who were active in the program.

In order to implement the recommendations, immediately after the workshops we followed administrative channels in order to establish a routine referral to public health nursing services. The local Health Department has divided the City of Billings and Yellowstone County into three sections with a team of staff nurses and home health aides designated for each area. One public health nurse is assigned to each hospital to facilitate discharge planning for the home health services. The initial assessment visit of the patient is made by direct internal referral to team member who serves the patient's home area. Verification of patient learning and need for additional reinforcement or support is reported back to the nursing division when the M.I. Teaching Protocol is returned for review by the team to determine needs and areas of strength or weakness. The Protocol is then filed with the patient's medical record. This method has worked well at St. Vincent's. Patients who require additional home health assistance may choose either UpJohn Homemaker Service or Home Health Services from the City-County Health Department.

Secondly, teaching manuals were assembled to include all handouts from the workshops and content of certain specific posters, and they were placed on each division except Maternity and Pediatrics. In order for staff nurses to become familiar with the content of the teaching tapes, these were summarized and placed in the manuals for reference when interacting with the

patients and families in learning situations. Additional copies were prepared for the Project Officer, Project Co-Directors, and for library check-out. All myocardial infarction patient teaching materials were gathered into one area, accessible to all divisions and clearly identified for the staff. A copy of the manual was shared with the Nurse Specialist at Billings' Deaconess and placed in the C.I.C.U. Division for reference. The office copy was shared with the Coordinator of the M.S.U. Continuing Nursing Education Program to demonstrate a method of application of concepts presented in workshops on the teaching-learning process. As a result, there have been a number of requests for this material. However, our capabilities for compliance are limited by lack of time and resources for duplication and distribution.

As is usual with a new or different experience, some participants immediately became involved with teaching patients and family members. The two Head Nurses who attended the sessions were very positive in their assessment of teaching and patient/family learning and offered encouragement to and support for their nursing staff. A few younger, less-experienced staff nurses or recent graduates were reluctant to proceed without guidance. Some of them needed more help from the Nurse Clinician. Unfortunately, she resigned her position within two months after the sessions.

Again we were frustrated by this new constraint to the teaching program. However, two staff nurses who are really committed to patient learning and who alternate from C.I.C.U. to medical divisions assumed leadership of the program. They now guide staff nurses to follow the Protocol and provide continuity in teaching for patients and families. Just now, as the Project is ending, again a new Nurse Clinician has been assigned, but the team continues to coordinate the patient/family teaching program implemented by the staff. In addition, they are actively seeking newly assigned nurses to participate in teaching by demonstrating procedures and offering back-up support to peers by encouraging them to explore strengths and weaknesses and to gain skills of teaching. At the May, 1976 quarterly meeting of the overall Nursing Service Committee, the C.I.C.U. Head Nurse requested a follow-up workshop exactly like the ones which had been presented initially in December.

The Project Coordinator has served as a consultant to the staff nurses and to the Clinicians and has been available for assistance where necessary. However, it is our belief that for the Program to continue, the staff must be actively involved and responsible for its implementation.

Evaluation of the Myocardial Infarction Teaching Program

Findings from interim evaluation studies were incorporated into the teaching plans for patients and families in both hospitals. Focal points for emphasis were designated as these needs were identified. It became increasingly clear that, with the variations in continuity of the Nurse Clinician assignment and the staff changes at St. Vincent's, capability for a valid joint evaluation of the patient/family teaching program at this point was unrealistic. The program is progressing, the patient prescriptions and the teaching protocol are being utilized, and the multidisciplinary team members are involved in patient and family learning.

We anticipated methods for a comparative evaluation, but were not able to develop a tool which would demonstrate objective judgement. Most nurses in this area have had extremely limited experiences in research activities. For example, the first exposure of M.S.U. baccalaureate nursing students to research study was during the school year 1975-76. Even on a graduate level, few nurses have developed expertise in research evaluation.

The constraint imposed by lack of staff members with research skills and the time factors proved to be an unexpected limitation. This was further complicated by the change in focus of the Project during January, 1976 which required the Coordinator to be involved with additional rural hospitals having affiliated nursing homes.

We sought assistance from the Montana State University School of Nursing students and faculty, but during this time there were no graduate students assigned to the Billings Extended Campus. However, to help develop skills in research, a visiting professor from Seattle University was assisting faculty and students with initial first level basic concepts in nursing research.

Seven Junior students of the Montana State University School of Nursing, under the direction of a medical faculty member and the visiting consultant, carried out the research study on the effectiveness of teaching the myocardial infarction patient. They selected patients from Billings' Deaconess Hospital only, because of the possible discrepencies which might otherwise exist. The sample chosen consisted of patients who had participated in M.I. teaching during February, 1975, to provide a nine month time lapse. The study was done during Winter Quarter. Letters were written to ten physician internists about the feasibility of including their patients in the study.

Statement of Problem:

How do myocardial infarction patients change their lifestyle nine months after receiving a structured teaching program? In this study, lifestyle was determined to include smoking tobacco, reaching and maintaining ideal weight, alcoholic beverage intake, exercise program, daily rest period, diet changes, prescribed diet, medications, physical and emotional stress, and employment.

Patient Population:

An initial constraint was identified immediately, because the students were able to focus only on patients from within the city limits of Billings. The Nurse Specialist supplied names and addresses of 16 possible patients who were on the teaching program in February of 1975. These people were all approached, but the total population used in the study was nine. Of the other seven, two refused to participate, two had died, one had moved away, they were unable to reach one, and one had been readmitted to the hospital and only recently dismissed and was, therefore, no longer a valid participant in this study.

Total number approached	16
Not included in sample	7
Number in research sample	9

Number of males in research sample 8
Number of females in research sample . . . 1

Number married 8
Number single (widower) 1

Age range . . . . . 36 - 70

Research Tool:

A questionnaire was designed to determine how the myocardial patient changes a lifestyle nine months after the M.I. teaching in the areas of smoking, diet, exercise and medications. Students handed the tool to the patient and sat by while it was completed. They were determined not to influence the person's thinking in any way.

Findings:

Quit smoking . . . . . 8 (100% of married)
(Widower smokes today)

Followed exercise program . . . . . 8 (100% of men)
(Woman did not)

Daily rest periods post M.I. 9 (100%)

Medication as prescribed (post M.I.) . . . 8 (100% of married)
(Widower does not)

Medication as prescribed in Jan. 1976 . . 7 (78%)

Diet regimen . . . . . 8 (100% of married)
(Public health nurse consulting with widower)

Retired from job post M.I. 7 (78%)
(Two working part-time)

Finding related to weight loss was inconclusive because of the size and composition of the sample. Nine months later, all respondents indicate that they seldom drink alcohol, and although all patients tended to worry before the M.I. (at which time the lady worried more than the men), at the time of the study, the married group worried less than the widower who was alone.

Student Conclusions and Recommendations:

The students recognized that the statistics were skewed, the sample was limited, and many factors influenced the validity of this small study. They found that when an "Executive Wife" was involved, the patients who were studied adhered in all areas to their changed lifestyles. This is interesting and appears to relate to comparable findings from a study done in Seattle. All patient respondents felt that the teaching program had helped them.

The findings related to early use of the teaching protocol; however, their conclusions and recommendations were indicators which, during the interim, had been incorporated into the program. For example, they identified a need for public health nursing assessment and support to maintain such

behavioral changes as reduction or cessation of smoking and adaptation of the medication regimen into the patient's adjusted living patterns at home.

At that time, not all patients understood that they were to benefit from a structured teaching program. They were pleased that the nursing, dietary, and physical therapy staff took time to talk about their conditions and the changes in their patterns of living. The students' recommendation to make certain that the patient knows he is on a teaching program was related directly to the use of the Cardiac Education Prescription and the M.I. Teaching Protocol.

Another factor identified in this study of patients ranging in age from 36 to 70 is that the teacher must recognize the variables which influence patient and family learning needs. It is necessary to consider age, sex, level of education, cultural bias, acuteness of the situation, the medical treatment, job and the potential for continuation in the working population.

Replication of Research by Nurse Specialist

In recognition of the lack of preparation in research activities of nurses in the State both on baccalaureate and graduate levels, faculty members and Nursing Service personnel throughout Montana are involved in the cooperative venture of a number of university and private nursing school programs under the direction of the Western Interstate Commission for Higher Education in Nursing. The project is designed to help meet the needs of nurses for skills in research evaluation.

The Nurse Specialist at Billings' Deaconess Hospital is involved in replicating a research study to identify ways of changing teaching of the myocardial infarction patients about diet. Improved learning in the dietary instruction was identified as an area for focus and these tools were available for replication. It is goal-directed to help patients learn about diet and utilize assessment tools to determine if and what the patient has learned. The study will not be completed until fall, after the final conferences with the W.I.C.H.E.N. resource staff in Seattle.

Conclusions and Recommendations for Myocardial Infarction Teaching Program

The Project for sharing health education services between the two urban hospitals in Billings designated first priority to meeting the learning needs of the patient who has had a myocardial infarction and his family members. Therefore, it seems logical at this point in the Final Report to make some observations on the methods which were explored to develop the teaching program to meet these needs and to offer recommendations.

At the very beginning of this Project, we identified the existence of the age-old problem of medical and hospital staff who tend to equate telling with teaching. For a number of reasons including a heavy workload, a busy appointment schedule with time limitations of office visit, limited direct patient contact in the clinical area, and inadequate preparation and commitment for teaching, most "teachers" at all levels fail to adequately set the appropriate climate and to recognize the person's learning readiness. In addition, they

tend to make assumptions about what the patient needs to know and proceed to inform him. There is research to substantiate that inadequate communication or partial communication will create needless fear and anxieties which complicate the problems of compliance. Furthermore, the patient must be motivated to believe that the information is important. It must be a valid strength within his own value system before he can incorporate it as a meaningful change in the family approaches to living.

We found that most patients and family members benefit from the rationale for the recommended changes. If the information makes sense and is important, they are more likely to accept the recommendations for adaptations which allow them to make realistic immediate and long-range plans for living within the limitation imposed for recovery from the infarction.

The need for an outline related to terminal objectives to evaluate if, in fact, the patient and family learned was the basis for development of the teaching tool. It was designated as a "protocol" by the cardiologists on the multidisciplinary team. It serves as an outline for content and a record of the patient's and partner's or family member's learning.

Observation of the Myocardial Infarction Teaching Protocol reveals that the cardiac teaching prescription is being used. However, there is a need to add a statement to the pre-printed Physician's Order Sheet for C.I.C.U.-Myocardial Infarction which will allow the physician to place the patient on the M.I. Teaching Protocol by simple check mark. This will also remind him to designate the learning areas and sign the following page of the patient's chart, which is the prescription order for education.

The public health nursing follow-up reveals that in spite of consistent adherance to the Protocol by enthusiastic nurses and continuity of supervision of the teaching program by the nurse clinician and specialist, the levels of anxiety and subconscious denial of the seriousness of the attack interfere with the patient's ability to fully comprehend the concepts. When he returns home, the changes required in the family lifestyle become more meaningful.

The Nurse Specialist's observation that people deliver most of the information to themselves is a valid application of a principle of adult education, which emphasizes learner involvement. In addition, during the hospitalization, the patient is able to explore his beliefs, feelings, and newly gained ideas with staff who are constantly within the reach of his voice. This situation changes upon discharge and when questions arise, the family must depend upon their own interpretation of the learning which was guided by a caring person who answered patients' questions, offered additional knowledge, and explored patients' and families' understanding within the clinical environment of the hospital. However, in the home situation where the need is greatest for support and reinforcement, the patient and his family have only their memory on which to base the adaptations of newly learned concepts into a familiar setting of long established habit patterns.

The take-home materials which had been selected for the patient learning program have been inadequate and the team has reviewed a number of bulletins or other resources which will reinforce the audio tape series and other learning methods used during hospitalization. The possibility of developing

and printing a take-home item was explored. However, the bulletin "Heart Attack: What Now?" developed for the Georgia Heart Association by Prickett & Hull Associates appears to meet this need. The cost is minimal and it anticipates the patient and family's needs for reinforcement of learning. In passing, we offer a word of caution. In the process of selection or adaptation of materials, a valid evaluation of an item's ability to fit into the specific needs of a program is essential. Far too often health agency personnel choose tools devised to meet the criteria of other programs and attempt an immediate implementation without study of the implications or the impact within the constraints of a local situation. It was the judgement of the local team that this bulletin would allow the patient and family to continue to learn at home.

A "Mended Hearts Club" was organized by the Yellowstone Heart Association in the Billings area in 1975 to allow persons who have had cardiac surgery to share experiences and gain support of their peers and the resource staff. A similar group sponsored by the Lung Association and the urban hospitals has been established for patients with chronic obstructive pulmonary diseases. Following a series of workshops on chronic lung diseases, a group of patients and their family members began in the fall of 1975 to hold monthly meetings. The Project Coordinator was instrumental in organizing this group and involving other staff of the hospitals. Recently, a Respiratory Therapist experienced in working with community learning groups joined the sales staff of a local oxygen equipment supply company. He has expressed interest in joining with the other clinicians and therapists in providing continuity of leadership for these meetings.

We recommend that a similar group be established to aid patients and family members in rehabilitation after myocardial infarction, and that a regular referral be developed to assure the opportunity for continued verification of learning and to maximize the required changes in behavior.

The format of the staff development program for teaching the myocardial infarction patient and his family was shared with the District IV Hospital Learning Center with headquarters in Butte. Their focus was on hospital discharge. This educational methodology which stresses group involvement in the learning process lends itself to a variety of workshop topics. The objectives listed on pages 13 and 14 can be applied to any number of patient and family learning situations and can be related to other diseases and conditions.

It is also recommended that hospitals incorporate a workshop on teaching-learning methods into their orientation program for professional employees.

SHARING WITH A RURAL HOSPITAL

The second purpose of the contract was to explore the possibility of involving the small surrounding rural hospitals to share patient education services with the Billings institutions. The Project Coordinator approached the President to schedule a meeting with the District 6 Health Care Learning Center Board to describe the concept of sharing patient education services in the Region. Copies of the technical proposal were distributed and discussed

at the next regular meeting to clarify questions and to share ideas and priorities which were proposed at the Consulting Committee meeting in September. Prior to their regular business meeting as a Montana Hospital District, the Board meets to discuss learning needs and problems. In closed session, they explored interest and potential for participation in the Project. Seven rural hospitals are located in the Billings trade area. They are in Harlowton (93 miles distant), Big Timber (81 miles), Red Lodge (63 miles), Crow Agency (61 miles), Roundup (53 miles), Hardin (46 miles), and Columbus (41 miles). These agencies, along with the two urban hospitals, make up the local district of the Montana Hospital Association.

It was the decision of the Board that the hospital at Columbus in Stillwater County would be the logical site for a number of reasons. Generally, it had a stable patient census. It does not have an affiliated nursing home as do four of the other rural hospitals. However, a new 83 bed independent nursing and retirement home was opened during the spring. Furthermore, it is located on an interstate highway and is closest to Billings. The Hospital Administrator from Columbus represented the Learning Center on the Consulting Committee of the Project.

The next step of the process was to arrange a meeting on October 16, 1974, with the Administrators of the hospital and the Stillwater Convalescent Care Center to explain the purposes of the Project and to verify their interest and consent. The Nursing Home Administrator, who was later appointed to represent the Nursing Home Association on the Consulting Committee of the Project, accepted the proposal immediately. The Hospital Administrator was also very enthusiastic; however, by policy statement, the Board of Trustees had to be involved in any decisions affecting Hospital-Community relations. The Project Coordinator introduced the sharing concept at the regular monthly meeting of the Board in November. In addition to the description of the technical proposal for the Project, the reprint of "Implementation of Patient Education in Health Care Facilities" and the "Steps to Organize a Patient Education Program" were reviewed as a basis for discussion. The Board of Trustees unanimously approved participation in the Project. One of the two physicians who practice in the County attended the meeting of the Board and reacted very positively to the concept of patient and family education. From a practical standpoint, it was decided to wait until the Nursing Service Director of the Hospital returned from vacation before beginning to plan in Stillwater County.

In the meantime, the Project Coordinator became acquainted with the area. The 1974 estimated population of Stillwater County was 5,200 and it comprises an area of 1,794 square miles. Columbus, the County Seat, is on the east-west interstate highway. One physician is located in Columbus and the second is fourteen miles distant in the southern mountainous area at Absarokee. Parenthetically, a third physician, who completed post-graduate work in Pediatrics, established a practice in Columbus during November of 1975. Park City, at the eastern border, is the only other population center in the County. The chief industry is agriculture, largely beef cattle ranches, with irrigated land along the Yellowstone River for sugar beets, corn, hay, and some small grains. There are some limited mineral mining explorations in the mountain area.

The Hospital has 32 beds with a varying occupancy rate. The Nursing Home,

which usually has a waiting list, has 83 beds and includes retirement, intermediate, and skilled care. It is certified for participation in Title 19. Since there is no public health nursing service in the County, the nurses are frequently called upon to be health counselors in the outlying areas. There is an active Home Demonstration Council. The South Central Regional Mental Health Center has a resident counselor there who maintains a satellite office in the Hospital. In addition, the local Health Planning Council has assessed health needs in the County and set a priority for Emergency Medical Services. A Senior Citizens Center is being established in Columbus and a similar small center is located in Absarokee.

Resource Committee

In December, a conference was held at the Stillwater Hospital with the Administrators and Nursing Service Directors of both agencies. They suggested names of persons who could be asked to serve on the Resource Committee and approved a rough draft of a letter to invite representatives to the first County-wide meeting in January. The Project Coordinator urged that personnel of the nursing staffs participate in the M.S.U. Continuing Nursing Education series on the teaching-learning process.

The Chief of the Health Education Bureau from the State Department of Health, who is Co-Director of the Project, also attended the Resource Committee meeting with the Project Coordinator. Purposes of the Contract were explained and handout materials were used to focus discussion. Appropriate materials from the Model for Planning Patient Education, D.H.E.W. publication No. HMS 73-4023, were duplicated to identify specific guidelines for sharing services and the steps for planning patient/family learning. Sixteen Resource Committee members represented a wide variety of professional and community participants, including a physician, pharmacist, mental health consultant, County Agent, hospital board member, Comprehensive Planning Council Board member, professional nurses, home demonstration council, Senior Citizens group, and other interested citizens from all sections of the County. Both Administrators and Nursing Service Directors, together with the dietitian and physical therapist who consult in the Hospital and Nursing Home attended as members of the Committee.

The group explored problem areas in all age groups which could be improved through patient and family learning. Concerns were expressed about heart disease, diabetes, prenatal classes, arthritis, and other conditions related to aging, especially stroke and emphysema.

The dietitian felt that nutrition was a factor for patient and family learning, not only for the diabetics and other special dietary problems, but generally on food servings for healthful living. Another member expressed concern that the proximity to a large medical center led patients to seek needed care from specialists, and as a result, frequently had medications ordered for them by more than one physician. It was stated that many families in the County "doctor" in Billings. In addition, patients patronize the several large discount pharmacies in the larger City to fill prescriptions, particularly because they offer a sizeable discount to persons over 65 years of age. As a result, the local pharmacists have no record of all medications prescribed for a patient and are unaware of duplications and potentially

hazardous conditions which result from interactions between two or more prescriptions and/or over-the-counter drugs. There are two drug stores in Columbus, and one in Absarokee. The mental health consultant identified a number of patients who were unfamiliar with their medication regimen and "took three pink pills every morning." The physician and pharmacist agreed that a community education program on medications could be very beneficial.

During the brief review of procedure for staff development in the area of teaching skills, a staff nurse expressed concern that the inservice programs for the two agencies would be combined. It was agreed that development of skills to help adults learn would benefit patients and families in both institutions. It was also suggested that as learning needs were identified, inservice meetings for staff development alternate between the Hospital and the Nursing Home on a regular schedule.

They further agreed that details of the planning should be left to the Hospital and Nursing personnel and the Project Coordinator to determine the priority needs of patients and families and to establish the inservice programs based on the interest and needs of the combined staff members. In addition, the Resource Committee members volunteered to assist wherever and whenever needs arose.

Assessment of Needs

The Coordinator met with Directors of Nursing Service to begin planning for staff involvement to determine priority needs for patients, families, and staff. The Nursing Service Director of the Hospital worked part-time and, in fact, most of the professional staff nurses were part-time employees. The number of personnel assigned was directly related to the patient census and the characteristics of the patient population. However, because the percentage of occupancy in the Convalescent Care Center remained at maximum, the nursing staff was generally stable. The Hospital has a cardiac monitor and two bed unit for intensive care. Some of the nurses have participated in the critical care courses offered by the Specialist and Clinician Nurses in Billings and the State-wide Regional Medical Program sponsored courses in coronary care.

During March and early April, meetings were concerned with assessment of local needs. The nominal group process was used to generate ideas. The question, "What interferes with patient learning," was used to focus thinking. Nurses, nurse aides, dietary and housekeeping personnel were asked to silently list as many physical, mental, environmental, and social factors as possible. We found it necessary to use simple terminology when meeting jointly with these groups of varied backgrounds.

A second focus was on those obstacles to patient learning about which something could be done. The staff input was summarized at each session and combined to be analyzed for establishing priority. Meetings were held twice each time to allow the 7:00-3:00 and 3:00-11:00 personnel to participate without depleting the divisions of staff.

The results were generally what the Nursing Service Directors had anticipated. Lack of adequate communication was rated to be the greatest

problem. In addition, an uncoordinated teaching program, lack of training, lack of time, and lack of a common terminology were of the greatest concern; closely followed by the physical setting for teaching and lack of understanding of diets. The priority patients and families selected after the series of four meetings were those with treatable heart disease and diabetes. Priority staff needs were determined to be an understanding of the conditions of these patients and to gain skills in teaching which could be incorporated into the plan of care.

Handout materials were prepared to summarize the steps in planning for patient teaching. Concepts basic to planning and the proposed procedure to follow were utilized with administration and made available to staff. Other handout materials from the Conference on Aging, sponsored by the District 6 Health Care Learning Center, on "How to Stay Healthy Though Older" and "Working with Patients with Aphasia" were given to all staff who attended the nominal group sessions.

The rationale for this distribution was directly related to need for understanding the elderly patients in hospitals, but especially in the nursing home. The Psychiatric Nurse Specialist from the Regional Mental Health Center was also meeting regularly with the nursing home personnel. Her focus was on interpersonal relationship with the elderly and the staff was motivated to seek more and varied information to understand the elderly patient's needs. The Project Coordinator conferred frequently with the Mental Health Center Nurse Specialist and the Supervisor of the Nursing Home to avoid duplication in planning and to support the concepts which were being offered concurrently.

The Director of Nursing Services of the Nursing Home and her relief assistant were currently enrolled in the M.S.U. Continuing Nursing Education teaching-learning process workshops. One of their goals for staff development was to utilize appropriate resources wherever possible. They were planning to develop the skills of an increased number of personnel needed to staff the new and larger agency and to meet the requirements of certification for Medicare and Medicaid payments.

Planning for Staff Development

The multidisciplinary team in small rural hospitals with limited staff, we discovered, involves primarily the medical and nursing staff and, to a limited extent, the consulting pharmacist(s) who own(s) the local drugstore. The Nursing Director is the key person of the team. To begin planning for staff development, the Project Coordinator summarized materials from various sources based on the Model for Planning Patient Education, and met with the Directors of Nursing Service in late March to discuss procedure. We reviewed concepts basic to planning which focused on involving all health workers who had contact with the patient and family to look at all elements that comprise the program: materials, patients, staff, the setting, what could be shared from the urban hospitals or because of the unique rural area needed to be developed. We related content to the target groups with treatable heart disease and the diabetic, along with the staff need for communication skills.

It was decided to begin with a series of meetings on heart disease. We

planned inservice programs which followed a sequential pattern, beginning with a review and, for some staff, new knowledge of the pump action of the heart, using films, diagrams, and models of the heart and circulatory system and diagrams depicting what happens during the healing process after a heart attack. As a basis for discussion, we shared the Yellowstone County Heart Association program on "Instead of a Heart Attack" slide/speaker presentation, which focused on risk factors. To experiment with sharing, the quiz on risk factors was used at the beginning of this session to focus the participants' attention. Then, at the end, each one was given the handout prepared for community education on high and low cholesterol and fat foods and the Metropolitan Life Insurance Company table of normal weights and heights. We explored how this knowledge could be shared with their own family members as well as with patients.

Simple, single-concept posters were left for both the Hospital and Nursing Home bulletin boards. For example, two posters were made of magazine cutouts of pictures of food; one with foods high in cholesterol and poly saturated fats, and the other showing meal selections containing examples of low cholesterol and low fat foods from basic four items. In addition, on each field trip into the County, the Coordinator visited with the pharmacists in Columbus to keep them informed of goals, progress and problem areas.

Programs were planned in order that the Consulting Dietitian who comes once monthly could participate in the inservice. We discussed daily food needs and stressed average size servings. In cow country, the mainstay of the diet is beef and furthermore, in small rural grocery stores, shelves of canned and usually highly salted fish and shellfish are predominant. Only rarely is fresh fish readily available. We encouraged fishing the mountain streams for trout and storing a supply in the home freezers. A major goal of the program was to use educational methodology to involve the participants in their own learning by the use of models, film strips, posters, and displays to initiate discussion related to their needs, interests, lifestyle, and to provide a base for incorporation of the knowledge into their work and home situations.

For example, at one inservice session related to treatable heart disease, we displayed low sodium foods in average size servings. We used both plastic models and food items, each labeled with the appropriate sodium content. A display of high sodium non-food items such as toothpaste and mouthwash were also included. One item of special interest was a large individual serving of steak of a size usually found on the rancher's table. This was displayed with a tag to indicate that it contained the total daily sodium allotment for an individual on mild sodium restricted diet. We emphasized low sodium canned food and non or low sodium seasonings and a display of herbs. A table of appropriate herbs to season foods was left with the cooks.

At the beginning of each session, usually offered once each month, we reviewed briefly what had been discussed at the previous meeting to allow for feedback of understanding and sharing of experiences. In addition, this activity served to briefly orient those members of staff who had not attended but had read the handouts left for them. Members of the staff were overheard to questions their peers who had not attended a session to verify why they had not and to explore with absentees ideas that they had gained. They also

offered to share handout materials and called attention to bulletin board displays. Following the low sodium food display session which, incidentally, was also attended by the County Home Demonstration Agent, a number of those not present were chided by their associates as having "really missed something great!" The Kitchen Staff of both the Hospital and Nursing Home attended almost without fail every scheduled learning session.

As an adjunct to the program of patient and family learning, the Robert J. Brady Company flip-charts on "Heart Attack" and "Hypertension" were left in the agencies to be shared as needed.

The same format was followed in presenting learning programs on diabetes. We shared content which was a part of the Diabetic Patient Education Program at St. Vincent's. A study guide outline of general information about diabetes was prepared for all participants. St. Vincent's Diabetic Clinician shared the Medifact film on Diabetes Mellitus, and the content served as a basis for discussion at future inservice programs. The Consulting Dietitian presented a learning session on diabetic food exchanges using a slide/cassette presentation. In addition, two sets of bulletin board posters showing food items of equal exchange value were made up by the Project Secretary and were given to each institution. A sample dietary interview form initiated this learning session to allow each participant to choose equivalent food exchange. As a summary of the session, the staff completed the study guide. To help the nurses to teach diabetic patients, the Robert J. Brady Company "Diabetes Mellitus" flip-chart was purchased and left in Columbus to be shared as needed by the patients in either the hospital or the Convalescent Care Center.

The two groups of participants at this session decided that they would pay more attention to reading labels on foods and would be more aware of fruit and vegetables as opposed to the typical country food styles of cake, pies, and other rich desserts in their own family meals, in order to plan for better nutrition and to help control weight. We attempted to conclude each session with a positive commitment on the part of participants of how the knowledge gained might be incorporated into their work activities or their family living. They shared ideas and were motivated to explore new ways.

Patient with a Pacemaker Program

Professional nurses in the Nursing Home expressed a need for additional, current knowledge and skills in working with the patient who has a pacemaker inserted. Critical care nurses were approached, and the Nurse Clinician from St. Vincent's presented an inservice in mid-summer which was shared with other hospitals and rural nursing homes in the Health Care Learning Center district. The Project Secretary printed key information on a 12" x 18" spiral bound artist's sketch pad which was used to involve the participants in learning. Registered and licensed practical nurses were invited and also the maintenance people who had responsibility for and experience with electrical equipment. Nurses from Big Timber and Harlowton attended. The content was duplicated and shared with other rural hospitals and nursing homes in the region.

Staff Development - Adult Learning Skills

During vacation times, small rural hospitals and nursing homes maintain

a very limited staff, adequate to meet the needs for patient care, but making it difficult to plan time for scheduled programs. We also used this opportunity for vacation and to develop plans for other identified projects. In September, the focus in Stillwater County was on adult teaching and learning concepts. We planned, with the Directors of Nursing Service, for involvement of staff. Each participant took a values quiz that reflected attitudes and beliefs about adult learning and we used posters to identify how people learn through the senses, by room arrangements conducive to a learning climate, assessment of patient and staff member readiness for learning, and concepts related to teaching instead of telling. They practiced adult education methods to apply these ideas.

During a small group discussion exercise at each of the sessions in September, the participants shared experiences of how the knowledge and skills they had gained through the planned inservice programs were used to change behavior. As they shared their experiences in the larger group, they related behavior changes in themselves and their own family members in addition to use of this knowledge to help patients and their families. The brief informal evaluation revealed a number of changes:

- Avoiding the use of baking soda for heartburn because the individual experiences swelling of feet and ankles.
- Becoming alert to careful rinsing of mouth of patients on sodium restriction after brushing teeth and using mouthwashes.
- Making changes in the diet in the home, such as
    - . Substituting average size for previous larger size portions
    - . Substituting fruit for rich desserts
    - . Using less beef (a remarkable change for cattle ranch families)
    - . Substituting fruit and pick-up vegetables as snacks instead of candy (both parents & children).

Another focus in adult learning was designed to help the participants with listening and communication skills, since an assessment of need by staff and exploration with the Directors of Nursing Service revealed that area of weakness. One-way and two-way communication practice, and listening in order to feed back to the satisfaction of the cummunicator was almost too complicated for this group composed largely of nurse aides. Therefore, we followed this up with a discussion of common human needs based on Maslow's hierarchy and explored the individuals' responses in stress situations as well as the right to those coping mechanisms which maintain stability in mental health and interpersonal relationships.

We found that these concepts are difficult to achieve in the one hour of time set for inservice programs. It appears essential to allow more time and probably have a stable group which meets together at more frequent intervals. Therefore, our focus was largely on the development of skills for the staff to meet the needs of patients for support in a warm, caring manner. We continued to coordinate with other inservice classes and meetings conducted by the Mental Health Center and encouraged the Directors of Nursing Service to continue to

share inservice and staff development. We also urged them to cooperate in using educational resources of the District 6 Health Care Learning Center.

Change-over to a full-time Director of Nursing Service in the Hospital allowed for more positive attitudes toward initiation and implementation of staff learning. As a result, participation in the programs between the two agencies improved tremendously. They are presently sharing teaching programs for preparation of new aides to be employed in either the Hospital or Nursing Home. The two Directors of Nursing Service are sharing the teaching and the supervision. With staff turnover and health agency employment limited to only two institutions in the community, this is a logical mechanism for planning and sharing an educational offering. The existence of additional inservice programs with cooperative assessment and planning is a rewarding achievement which was not undertaken in Stillwater County until the demonstration of sharing and providing a positive experience in learning to work together was initiated by the Project.

Community Medication Education Program

Inasmuch as the community had requested information about medications, a program was designed with the County Home Demonstration Council to focus on the symptom relievers purchased over-the-counter and their relationship to prescription drugs, in addition to the influence of health advertising. The process of developing this program necessitated many meetings with the Council to plan for their involvement and for proposed content; frequent individual contacts with the Home Demonstration Agent, all physicians and druggists in the County; preparation of appropriate teaching aids; coordination into County activities, especially "after beet harvest but before winter, so that old folks and men can come."

As plans progressed, a second meeting was held with the overall Resource Committee of Stillwater County for input and to share information in order to secure their cooperation in advertising the meeting in their areas.

County residents felt that it was a valid learning experience. The end of program evaluations indicated commitment to share information, especially about reading directions on medicine bottles and requesting specific information about medications. We used posters for instant feedback, focused interest by asking that they list the contents of their own medicine chest, elicited from each group what they should know about prescriptions and any other medicine, namely: name of drug, how and when to take it, how much, for how long, how to store it, the action, what signs to watch for and report, and whether or not a prescription was required for continued use. We urged that they ask for this information to be written down and used. We provided other colorful posters and accompanying handouts to involve participants in learning. Informal conversation with a number of those who participated in the meetings verifies that they are more aware of the need to know about medications in order to comply with treatment. Furthermore, because of the focus on average size servings of foods from the basic four groups, they are more conscious of the need to meet their family's nutritional needs through food choices rather than with supplementary vitamins.

Portions of this program were shared in Billings with a combined Social

Study and Health class at the Career Center High School and a Family Living Class in Home Economics who were exploring health concerns of women at Central Catholic High School.

ONGOING PROGRAMS IN PATIENT EDUCATION

Cognizant of the tremendous need for patient and family learning as well as the priority setting recommended by the Consulting Committee, it was essential to weigh very carefully where involvement would be productive and methods of experimentation could be explored.

Diabetic Patient Education

As has been indicated, St. Vincent's Hospital has had an ongoing patient and family education program widely known in the area as a Diabetic Clinic. When the Project began in 1974, a staff nurse had just replaced a well-qualified Medical-Surgical Nurse Clinician and was independently preparing herself to assume leadership of the program. In view of the fact that this is one of two such programs in Montana by which the hospitals offer a community service, the potential for sharing in the City was limited. Therefore, the hospital staff felt that efforts should be made in other areas of patient and family learning.

However, to assist the staff of the diabetic education program and to seek verification of Third Party Payment for patient education, the Project Coordinator developed a questionnaire based on assessment of concerns of the Diabetic Nurse, the staff nurse, and the dietitian who compose the major faculty. This questionnaire was mailed to each participant two months after each session, beginning with the "clinic" in March of 1975. Stamped, addressed envelopes were enclosed for return of the questionnaires. Questions related to insulin or oral medication, urine testing, diet, weight control, exercise, and personal care, especially of the feet and skin. There were also questions regarding management; time allotment; general attitude; opportunities to explore with resource staff at the session; and understanding the medical regimen. In the quest for information about third party insurance payments, we asked for the name and address of the insurance company (if the family had insurance) and whether or not they had sent in the receipt for reimbursement of the fees. If receipts had been submitted, we asked for the nature of the response.

We developed an information sheet about reimbursement. The staff were reluctant to omit the name of "clinic," but agreed to call the sessions "Diabetic Patient Education Clinics." Organized outpatient services are not generally accepted in this rural area, therefore the Business Office orientation is to billing and collection of in-house hospital fees. To avoid any confusion for audit control, the Business Office representative collects the money from each participant and family member and issues a receipt. When we realized that respondents from the first sessions were not sending receipts to insurance carriers for reimbursement, the Project Coordinator met with the succeeding groups to explain the rationale and to urge them to mail copies of the receipt to the insurance carrier.

Rationale expressed by most respondents who did not submit a claim was interesting and, to them, very logical. The insurance companies had already

paid large sums to hospitals and/or physicians. This was a small fee; it was a personal gain for the patient and family and they didn't want to "bother the company for a small payment." Others expressed having been refused payment of other bills or had recently taken out insurance and either had a waiting period or were afraid to jeopardize future coverage. We understood their concerns, but urged the patients to reconsider in view of the White Paper on third party payment and the desire to have patient education recognized as a reimbursable cost. We had somewhat better success in later clinics. There has not been sufficient time, however, for feedback from the participants in the last clinic in May.

Since about one-half of the participants are from outside of Billings, we did not attempt a mail or telephone follow-up of those who did not respond. Of the 70 questionnaires sent out, 28 (or 40%) were returned. Three of these had no insurance and seventeen did not submit claims. Of the seven who did request reimbursement, five received payment ranging from $10.00 (for lab fee only) to the full amount of cost. One had received no response at the time the questionnaire was returned and only one payment was refused (by Medicare).

Questionnaire responses to verify insurance company reimbursement for this Diabetic Patient Education Program is summarized as follows:

	Total Cost	Amount Paid
Connecticut General (Minneapolis)	$ 46.00	$ 41.00
United Benefit of Omaha	40.00	34.00
Washington National Insurance (Evanston, Illinois)	40.00	40.00
Wisconsin Life	40.00	10.00
Company not identified	40.00	40.00
Medicare	40.00	none
Montana Physicians Service (Blue Shield)	40.00	(Last group queried - May, 1976)

We cannot be certain if, in fact, the reimbursement of the fees was truly intended as payment for patient learning or if it was due to the use of the word "clinic" in describing the program.

Responses were shared with the teaching staff to update and make the educational program more meaningful to patients and families.

Pediatric Preoperative Learning Program

Early in the first year of the Project, the Pediatric Nurse Clinician was involved with two Montana State University nursing faculty members in a joint Parent and Staff Pediatric Project at St. Vincent's Hospital. The basic objective was to improve communication between staff and parents/patients in the Department. Briefly stated, three sub-objectives were: (1) to increase

staff awareness of the needs of parents, (2) to increase staff effectiveness in a helping role, and (3) to increase parent satisfaction. One of the strategies was to devise a Semantic Differential Tool which was administered to parents and staff, to determine if there were a difference in the attitudes toward hospitalization of patients on Pediatrics. A control study was done in a comparable size hospital in another Montana city. Reliable measurements were made on the first and third objectives. During June and July, 1976, using research tools developed at Yale University, the second objective will be evaluated and the results will be available in September.

In her first approach to seek assistance from the Patient and Family Education Project, the Nurse Clinician felt that it would be appropriate to develop a tool which would relate needs and satisfactions to growth development levels. This idea was discarded and exploration initiated into the needs of children and parents related to preoperative care.

The process involved in setting up a teaching model to aid patients and family members evolved through a series of well defined steps, which are included here to demonstrate that a program does not just happen, nor can it be superimposed without adaptation to the specific local situation.

1. The Pediatric Head Nurse and Nursing Administration, together with key physicians, were in support of need for preoperative learning programs. This was determined by interview with appropriate individuals.
2. Pediatric Nurse Clinician and staff assessed what the child and the family would need to know to be prepared for surgical procedures at St. Vincent's Hospital. The information was summarized in the following series of questions:
   a. What will happen to the child?
      . Where will it happen?
      . Who will do it?
      . What will it feel like?
      . What is the procedure?
      . What does the equipment look like?
      . What does it do?
   b. What is to be expected of the child and family and how will/should they respond?
   c. Establish that the child is not to blame for the illness or injury which requires surgical procedure.
   d. Where is the organ to be removed/repaired located? Establish that no other part of the child's body will be harmed.
3. Conferences with key physicians, Head Nurse, Clinician, nursing faculty, pediatric staff and parents revealed information to be included in development of the tool "Criteria for Assessment for Preoperative Teaching of the Pre-School and Early School Age Child."

CRITERIA FOR ASSESSMENT FOR PREOPERATIVE TEACHING OF THE PRE-SCHOOL AND EARLY SCHOOL AGE CHILD:

Given an assignment to admit the child to Pediatrics, the staff

a. assesses information about the child from parent(s)

- facts about feeding
- toilet habits
- sleep pattern
- favorite toys
- any medications/allergies
- nicknames
- family routines (e.g., glass of milk and cookies at HS)
- habits (e.g., thumbsucking with certain object in hand)

b. establishes friendly relationship with the child, accepts him for himself and shows interest and concern

- recognizes the cultural background and/or possible disadvantages
  - . The nurse touches the Mexican American child when speaking to or about the child to the parents in order to avoid the "evil eye."
  - . Nurse recognizes Indian culture behavior patterns.
- asks child what the doctor and mommy (daddy) told him about why he has come to the hospital
- assesses the child's knowledge about previous hospitalization of self/family member/friend

c. communicates above information to team leader/patient's record

d. answers child's questions honestly and openly and approximately to the level of growth and development

e. assesses that child understands about the hospitalization before attempting to teach; provides objects (uses doll; puppets; pictures; paper & pencil; oral syringes; i.v. tubing, etc.) to elicit fears, anxieties, and knowledge bases

f. clarifies distortions in child's/parents' understandings (e.g., asks simple questions like

- "Why do your tonsils (appendix) have to come out?"
- "Where are they (is it)?"
- "What is Dr. ___(surgeon)_____ going to do?"
- "Did you know that Dr. ___(surgeon)___ is a friend of Dr. ___(pediatrician)___ ?"

g. makes clear to child that hospitalization is not a punishment for secret misdeeds, e.g., broken limb is an accident; eye muscle disorder or heart defect - born that way (if true) and no one is to blame

h. assesses relationship between parents and child

- listens for clues about attitudes
- ways or habits for discipline
- parental demands upon child

i. assesses parents' anxiety and/or knowledge level

- reinforces with positive explanations; gives information about hospital routines
- recognizes stress situations between parent and child/parent and staff
- explains child's regression (if appropriate) to earlier problems - is caused by stress or separation - and assures child/parent that there will be no rejection or punishment for accidents
- avoids attitudes that reinforce fear-anxiety-frustrations by expressing warmth and friendliness
- provides support.

4. We set about writing the criteria for teaching and decided that instead of using the terms "goals and objectives" it would be more understandable and useable if the statements were expressed in behavioral terms which describe what the child and the family would be able to know and do after the teaching had been completed. The content, directions, comments and examples were related to these behavioral areas. We share this format as an appendix to this Final Report because many persons have requested an example of how we chose to proceed.

5. The Nurse Clinician's concern that key information or portions of the plan might be overlooked or excluded led us to develop the first single-concept, low-cost flip-chart. Pictures cut from nursing and other current magazines were used to draw the child's and parents' attention to the concept. The related content was typed and attached to the back of each page in inverted position to provide the nurse/teacher with examples of comments she should use to pinpoint the child's attention.

Two licensed practical nurses in the Pediatric Department who routinely are assigned to evening duty prepared an exhibit box of visual aid material to help the child through seeing and handling objects related to surgical care. For example, a mask, surgical cap and gown, i.v. tubing, and a syringe were included. A doll was also placed in the box for use in assessing the child's awareness of the location of the incision or area of the body to be involved in the operative procedure.

Two flip-charts (10" x 13") with heavy back panels to allow for standing as an easel were prepared. Card stock was used for the pages which were covered with clear contact for protection. Four inch strips of crinolin (such as is used for pleating drapery) were attached to the back panels in order to form the easel stands. Two exhibit boxes were also assembled for the program. These patient/family teaching tools have been incorporated into the Montana State University-St. Vincent's Hospital project described at the beginning of this section.

6. St. Vincent's Hospital staff have been involved with the Allen Management Program for a number of years. Using these concepts, the Nurse Clinician, Project Coordinator, and nursing faculty member from Montana State University wrote criteria for implementing the Pediatric Preoperative Teaching Program:

CRITICAL PERFORMANCE AREAS

Objective 1.0 Use of the Basic Pre-Op Criteria to determine the needs of the patients and their families preoperatively

1.1 To introduce Pre-Op Criteria to staff
1.2 To display Pre-Op Material until staff have individually read the material
1.3 To hold individual or small group sessions to discuss pre-op criteria
1.4 To implement and correlate basic pre-op teaching
1.5 To develop and utilize pre-op teaching aids
1.6 To write a report including evaluation of staff's reactions to basic pre-op criteria and suggestions for additions
1.7 To continue improving pre-op program as Audit Committee establishes further standards and material.

NO.___	WHAT	WHO	WHEN	RESULTS
1.1.1	Introduction through interdepartmental meetings and directly after report - all shifts	Y.K.	Weekly	
1.2.1	Material displayed on In-service Board Each staff member to read and sign	Staff	Daily	
1.2.2	Material to be included in orientation of new staff	Y.K.	As needed	
1.3.1	Individual or small group sessions to discuss pre-operative criteria as staff is on assigned duty	Y.K. and Staff	Daily	
1.4.1	To plan, conduct and evaluate pre-op teaching with individual patients and families	All staff	Daily	
1.4.1.1	Team conferences	Staff	As needed	
1.4.1.2	Audit Committee meetings	YK & KT	Monthly	
1.4.2	To keep a record on progress notes of pre-op teaching and patient and family response	Staff	Daily	
1.5.1	Improve and expand pre-op teaching material and utilize (example - box containing display equipment that patient can examine preoperatively: I.V. bottles, syringes, mask, pictures, etc.)	Staff Y.K. B.K. B.C. C.H.	Use daily as needed	
1.5.2	Develop flip-chart and model display	Above	May 15	
1.6.1	Develop evaluation tool & implement use	BK - YK	June 10	
1.6.2	Evaluation report	Y.K.	July 1st	
1.7.1	Continue advance with Audit Committee progression	Y.K.	Aug. 1st	

7. The Nurse Clinician on Pediatrics in July of 1975, who had developed the critical performance areas, elected to do the initial evaluation herself before her maternity leave in August. However, health problems necessitated a leave of absence in early July and, as a result, she did not return to her assignment and the analysis was not done. In the meantime, a number of other complications arose which created additional constraints to the effective implementation of the Program. The Pediatric Nurse Clinician position at St. Vincent's remained open for almost a year. The Head Nurse also resigned and a new person was appointed on June 1, 1976, to fill this position which had remained essentially vacant for almost four months. We had not anticipated these delays.

A staff nurse did replace the Nurse Clinician to work with the M.S.U. faculty on the joint Parent/Staff Project at St. Vincent's. They are now preparing to evaluate the second objective of this Project, namely staff effectiveness in a helping role. The strategies for evaluation were initiated by the team on June 1, 1976.

Members of the Pink Lady Hospital Auxillary who are nurses volunteered to observe nursing care and provide base line data. Pediatric nursing staff are being oriented to the nursing care and patient teaching measures which will apply the strategies to deal with the stress points which create fears in the child, in order to decrease anxiety levels by the use of appropriate interventions. The pre-op teaching tools and methods developed by the Patient and Family Education Project have been incorporated into the strategies and will be included in the evaluation summaries.

A field testing was done on the tools developed at Yale University, New Haven, Connecticut, in preparation for observation of the interventions. In selective review of the items relating to learning, the four respondents who participated in the field test indicated positive responses regarding parent information given by the staff nurses. To the questions designed to determine parent satisfaction in relation to the admitting exam, the responses indicated that it was very good, and in the third area which was to observe the helping relationship in order to provide information to help the child adjust, responses were also positive.

During July, care will be given, observed, and recordings made on the tools. The team will analyze the data in relationship to the interventions. The results of the research project will be available in September.

Experimenting and Exploring Ways of Expanding Preoperative Teaching

Informal conversations indicated an enthusiastic response to the Pediatric Preoperative Teaching Program, and the nursing staff requested development of a tool more appropriate to the needs of adolescents. There were innumerable contacts with staff and adolescents to assess what should be included in a tool designed for this age group. Identical steps were followed to identify needs, resources, and effective measures. Adolescents requested photographs of the operating rooms and other areas of the hospital involved in surgical or therapeutic interventions.

A Montana State University senior nursing student volunteered to adapt the pre-op criteria established for preschool and 7-9 year olds to meet the needs of pre-teens and adolescents. The staff of the department took the snapshots used to illustrate content. This stage of the development was time consuming. Although the ideas of the staff had been recognized by the nursing student who adapted the content, the total program needed to be incorporated into the staff's plans for needs assessment and to identify the photographs which would best illustrate the tool. Anyone with a camera could have taken the pictures quickly, but it was essential that the tool evolve through their own activities in order for the nursing staff to become committed to its implementation.

When satisfactory pictures were obtained and additional illustrative material found from advertisements, a dummy model was assembled. Again, the information and format were verified with physicians, nurses, and appropriate hospital department personnel. The staff suggested the use of yellow card stock pages, size 8½" x 11", with content pertinent to the illustrations typed or printed on the pages in order for the adolescents to read the information easily. The staff could then interview the teenager and his family to support the learning experiences, verify knowledge, and allow skill practice for deep breathing, coughing, and exercises. We used clear contact to protect the covers and discovered that the local School District Instructional Media Center would allow us to use their laminating equipment for the pages at a cost which would be lower than that paid for the clear adhesive plastic.

The completed manuals were shared with head nurses and nursing supervisors throughout the hospital at a change of shift meeting for informational purposes. This group was most enthusiastic and requested that their nursing staff on medical-surgical areas review the flip-charts in order to consider adaptation to meet learning needs of the adult surgical patients. Again contacts were made with nurses on all shifts and various key surgeons to focus on changes that might be required in this area.

With minor adaptations and different photographs appropriate to these hospital divisions, the content was replicated. Several pages which related to postoperative care of patient, e.g., foley catheter, nasogastric tubes, electric suction, etc., were added. Pictures of the nursing personnel were changed since pediatric staff wear brightly colored pinafores to reduce the anxieties of small children.

Incidentally, we have had requests from staff with medical nursing orientation to also develop a teaching program with comparable appropriate tools for patients having diagnostic procedures.

Sharing Preoperative Teaching in Urban and Rural Hospitals

The Pediatric Head Nurse of the Billings' Deaconess Hospital resigned in July while we were adapting the Pediatric Pre-Op Teaching Flip-Chart to be shared with patients in that agency. It has since been determined that a tool for adolescents would be more appropriate since there is no longer a segregated department for small children. Those having heart surgery are placed on the newly remodeled adolescent wing.

The adolescent flip-chart is now being shared with Billings' Deaconess and with allowance for minor changes in photography and for routines of that institution, it can be adapted into the preoperative teaching program both for the adolescent wing and the adult units.

Parenthetically, these flip-charts were shared with the small rural hospitals in Stillwater, Carbon and Big Horn Counties. In these communities, the needs of patients were assessed based on the kinds of surgical procedures performed in each rural hospital. The objectives and dummy copies were viewed by representative physicians on staff at each rural agency, staff nurses, supervisors, and hospital administrators for input and critique. It was their decision to utilize magazine advertisements in most instances to illustrate the concepts involved so as not to mislead patients about equipment and procedures in these facilities. A few pictures were taken (using a Kodak 110 pocket camera) of local staff in order to provide the personal interest. These are now being completed and will be distributed before the Project is terminated. The Directors of Nursing Service in the rural hospitals have agreed to introduce the manuals and to initiate their use in each agency.

BILLINGS BREAST DAYS

Billings was one of the centers selected by the Montana Division, Mountain States Regional Medical Program for an educational endeavor aimed toward early detection of breast cancer. Meetings for orientation of physicians and nurses to gain essential knowledge and skills and a two-day clinic for the public, to screen and to teach women self-examination of the breast, were held in June of 1975. As a follow-up of this community venture, Billings' Deaconess Hospital audit committee wrote a criterion that every woman admitted for breast biopsy would be taught how to do breast self-examination or have her skills reinforced. In late July, the inservice staff nurse who helped in the coordination of Billings Breast Days developed a questionnaire which was enclosed in the paycheck of each woman employee to determine the extent of the practice of breast self-examination by this group. A summary of the responses indicated need for an inservice program for women in all departments of the hospital.

Planned for September, this program was based on an audio cassette-slide presentation developed by a nurse consultant and health educator of the State Department of Health in Helena. The Patient and Family Health Education Project Coordinator was requested to assist in developing the teaching content and the educational methods. Discussions with staff nurses and many health workers revealed an immediate constraint in finding the patient's teachable moment in this highly emotional surgical experience. Confronted with the question of how the criterion could be implemented on a generally busy surgical ward, compounded by short hospital stay if the lump is proven to be benign, we explored a number of methods and devised a flip-chart using low-cost, single-concept tools based on our experiences with the preoperative chart developed for small children.

We involved nurses to review content, verify information, and then we adopted the scheme of dividing the breast into four quadrants as taught to nurses and physicians during Billings Breast Days. Art work by the Project Secretary illustrated the teaching concept by pictorial direction and allowed the patient to be involved in practice.

The educational process included an inservice program for nurses to review breast structures and up-date current understanding of breast cancer based on scientific advances. The flip-chart was introduced at this time to help nurses cope with the patient's anxiety and stress; to verify questions and concerns; and to observe the practice of breast self-examination by the patient.

The program and the tool were shared with the other urban and rural hospitals in the Health Care Learning Center region. It has been used to introduce breast self-examination on the high school level in health classes and Home Economics/Family Living Classes who were exploring health concerns of women. Students checked out copies to share with their mothers and older sisters. Physicians were interested in having copies available in the office waiting rooms. Inservice programs to initiate the adoption of this tool into each type of agency have preceded its use.

TOTAL KNEE AND TOTAL HIP IMPLANTS

An orthopedic surgeon at Billings Clinic, who saw the Breast Self-Examination tool, suggested exploration of similar teaching programs for the patients having an implant for total knee replacement. The Patient and Family Education Project Coordinator and the inservice staff nurse at Billings' Deaconess Hospital gathered a bibliography. Copies were made of articles for distribution to staff nurses in preparation for a staff education program presented by the surgeon to nurses and physical therapy personnel. Questionnaires were sent to former patients to learn areas of concern and gaps in their knowledge. A process comparable to that used to develop the pre-op teaching program was followed. The surgeon took photographs to illustrate key concepts and to verify that the position of the limbs and the procedures and modalities used for nursing care and physical therapy activities were correct. This flip-chart (also on 10" x 13" yellow card stock) was divided into three sections. The first dealt with basic information to be given to the patient in the surgeon's office. It explained what the implant is, what it does, and lays the groundwork for the patient's decision to have the surgery. The second section deals with the preoperative and postoperative care and the surgery. The last part stresses preparation for discharge, with emphasis on physical therapy to regain strength and function. The patient has access to the flip-chart and is able to explore misunderstandings or concerns with the medical and nursing staff.

The patient becomes familiar with the risk factors and the rationale for cooperating in the plan of care. The process in preparation of the tool for knee implant was initiated by an outline of content from the inservice program for nurses. The facts were translated into simple understandable terms with a minimum of hospital jargon. We tested it on patients, with hospital personnel and physicians; we wrote and re-wrote; we prepared a dummy format to verify concepts and to relate the message to the pictorial illustrations before it was transferred to the card stock; and finally it was laminated to be ready for release to the patients.

Acceptance of the Total Knee tool by patients at Billings' Deaconess and the Billings Clinic is almost incredible. The concern of the patients who are unable to visualize the complex structure of a painful knee or hip and their anxiety when faced with a new experience prevent complete understanding of

the surgeon's explanations. The flip-chart, which illustrates the routines, procedures, and equipment, is reassuring because it allows the patient and family to realize their misconceptions. They become more knowledgeable about what is expected of them, what will be done to and with them, and how they can cooperate with the plans for nursing care and physical therapy. One lady expressed the thoughts of several others by her statement, "You really tell it like it is." Patients remarked that they felt less anxious and were oriented to the hospital experiences in the sequence of events. Nursing staff use the flip-chart to explain areas of identified need for information or assistance with exercises or procedures. Each patient usually has the chart on several occasions to reinforce their learning and to prepare for discharge and rehabilitation at home.

Almost immediately after the teaching program for Total Knee Replacement was implemented, we were urged to begin development of a tool for patients having Total Hip Replacement. The identical process was followed and the program is now ready to be adopted. There is no time to evaluate this effort. In fact, the part-time staff nurse in the Inservice Department at Billings' Deaconess is being replaced by a full-time Patient Teaching Coordinator. Together, these two nurses will introduce and implement this new learning program for the orthopedic division's patients and nursing staff.

Mechanism for Sharing in Another Setting

The necessity to recognize and work with the individual physicians in developing the programs for patient and family education is essential. The surgeons must be in support of the educational methodology developed and utilized by other members of the health team. It is likewise imperative to identify the key representatives within the various specialty groups. Sharing of programs between hospitals is truly dependent upon the recognition of the biases and the differences in operative procedures and postoperative management, as well as the rehabilitative exercise regimen practiced by the surgeons of different orientations. We learned that in specialty orthopedic surgery, the techniques vary among surgeons and unless the teaching tools and methods are based on individuals' practice and adapted to the specific concerns of the surgeon, they are not acceptable.

Although in our effort to share an educational service for orthopedic patients between the two hospitals we felt that we had communicated our goals to individualize the tools to the procedure practiced by each of the other two groups of orthopedic surgeons, our messages were not received and we had to deal with their refusal.

EXTENSION OF CONTRACT TO RURAL HOSPITALS WITH NURSING HOME AFFILIATES

On December 29, 1975, the Patient and Family Education Project was extended for six months and modified to initiate activities to expand the patient/family services to at least three small rural hospitals, preferably with nursing home affiliates, in the six county area around Billings. We were informed of the extension, but it was not until later in January that we learned of the change in focus of the Program. With the Project Co-Directors,

we explored which hospitals who had nursing home affiliates would be most appropriate for expansion of services. The limitation of winter travel on rural Montana's narrow highways which are not a part of the federal interstate system offered immediate restrictions. Therefore we chose the three hospitals closest to Billings, which were in Red Lodge (to the Southwest) in Carbon County, Hardin (Southeast) in Big Horn County, and Roundup (to the North) in Musselshell County.

Letters were written to administrators and directors of nursing service in those agencies. Responses were rather slow because of the press of work schedules and attendance at out-of-state meetings. We were never able to work with the Roundup Memorial Hospital and Nursing Home. The flu season and resignations which created staff limitations necessitated a nursing care assignment for the Director of Nursing Service. We offered to come at any time the situation was relieved to allow participation in the services of the Project. It is regrettable that we were unable to touch base in this agency.

Big Horn County Memorial Hospital and Nursing Home - Hardin

Big Horn County has a 1974 estimated population of 10,500 living within an area of 5,023 square miles, or approximately two persons per square mile. The Crow Indian Reservation is located on most of the land area of this County. It is interesting to note that in the early 1900's, legislative action by the State of Montana allowed non-Indians to purchase tracts of land within the reservation boundaries in exchange for educational resources to the Indian population. There are no so-called "Indian" schools maintained by the Bureau of Indian Affairs. All children, Indian and white, attend the public school system at all educational levels. In addition, families from both cultures reside side-by-side as neighbors and friends. Agriculture, with cattle and grain ranches, comprise the major industry, although the impact of strip coal mining is creating economic and environmental concerns.

The Hospital and Nursing Home is a one-story, fairly new building of 50 beds, sixteen of which are assigned to the Hospital with 34 to the Nursing Home. However, where the two sections join, two of these beds may be used for hospital patients as the need arises. The Administrator and Director of Nursing Service manage both divisions, and a Supervisor of the Nursing Home is a part-time employee who is experienced in geriatric nursing. She supervises the administration of nursing care five mornings each week until noon. In her absence, a licensed practical nurse is in charge with registered nurses of the hospital section available for nursing observation and decision. The Nursing Home is certified by Medicare and Medicaid and is licensed for skilled care only. There is an intermediate care nursing home in the community to which residents are transferred if they cannot return to their own homes. There is a Medical Clinic which consists of the three general practitioners who practice in the community. Incidentally, Public Health Nursing Services are available and the United Stated Public Health Service, Crow Agency Hospital is located fifteen miles south. Therefore, community resources exist for care when patients return to their home environment from either the Hospital or the Nursing Home.

In late February, the Administrator, Director of Nursing, and the

Supervisor of the Nursing Home attended a management conference in Billings which was sponsored by the Health Care Learning Center. At that time, initial contact was made with them to explore interest, needs, and potential for involvement in the Project on Patient and Family Education. All of them enthusiastically supported participation and were eager to become involved immediately to incorporate the nursing staff of both the Hospital and the Nursing Home into the process of planning. We explained the modified nominal group process we had used in Stillwater County to identify learning needs for patients and staff. It was agreed that the Project Coordinator would share this experience with the staff in Big Horn County at a meeting during the following week. It was felt that community input was important, but time limitation did not allow for organization of a County-wide committee. However, as we planned programs and methods and designed teaching tools, we sought the input available from family members who were visiting residents or patients in the health agencies.

At that first meeting in Hardin, we reviewed activities and methods which had been shared between the urban hospitals and the Stillwater County institutions. As we reviewed the programs which had been developed, a copy of the Breast Self-Examination Flip-Chart was requested for placement in the Medical Clinic. The Administrator of the Hospital was excited about Nursing Home involvement. He suggested that we explore if it would be practical to develop a tool which could be used to orient patients and family members to the routine and services of that section.

The process began with a staff meeting to identify needs of patients and staff in order to begin to focus on patient/family learning. They identified obstacles/problems which interfered with the cooperation of residents in his/her plan of care. A majority of the residents are elderly. Among the conditions with which the staff must deal are arteriosclerotic heart disease, mental retardation, chronic brain syndrome, diabetes, rheumatoid arthritis, paralysis, fracture of the hip, amputees, and other physical disabilities related to aging. Since the Nursing Home is licensed for skilled care only, effort is made to prepare many patients and families for eventual discharge to homes or agencies which provide lesser care. Each resident has a current nursing care plan, and once each month all medications are evaluated and every patient is examined by the physicians.

The Nursing Home also has a planned activities program supervised by a part-time Director, who also arranges occupational therapy projects for the residents. The physical activities program is under the direction of a local consultant and a physical therapy aide encourages and assists in motivating residents to move about and participate in the planned program.

Staff Development

An objective of the educational program was to assist all of the staff to understand the rationale for physical, emotional, and social changes of aging and illness, and to use these concepts in a positive way in planning and implementing care, as well as meeting their own needs for a satisfactory work experience. The process of meeting the identified needs included staff education sessions using the Concept Media series on physical changes in aging;

interpersonal relations based on Maslow's hierarchy of human needs; sensory deprivation, especially of sight and hearing; and dealing with coping mechanisms of persons who have been deprived of sensory function.

Orientation Manual for Patients and Families

In development of the Nursing Home Orientation tool, we used the group process to involve the staff from the very beginning. The Supervisor identified the routine of the day and the available services during the first visit of the Coordinator. Content was duplicated and taken to a staff meeting which was attended by all shifts and all levels of personnel. They suggested, revised, contributed new information, and accepted the idea as a valid tool to assist them to work with patients and families in order to explore misunderstanding and to help the family be more comfortable about leaving one of its members. They were especially concerned that there be focus on the varied cultures represented by Indian and Japanese Americans which might provide a better self-image for residents and personnel.

On March 17, 1976, the Project Coordinator scheduled a staff meeting in Hardin to coincide with a visit from Mr. Stan Rosenberg of Rockville, Maryland, who was on a field trip to the west. It was also arranged for the Project Co-Directors to attend. However, one of the Co-Directors, the Administrator of the Hospital and Medical Facilities Division, was represented by the Health Educator from his office in Helena. They attended this session to observe educational methodology employed in dealing with problems related to small, long-term care institutions in rural areas. The group sat around tables drawn together in the lounge area, with pencils in hand to edit the rough drafts of content for the flip-chart. This congenial climate and the suggestions of the visitors provided a worthwhile experience for the Nursing Home staff. Everyone felt comfortable to question, comment, and draw upon the expertise of the visitors to help them clarify the messages to be included in an orientation tool.

Several dummy pages were prepared to illustrate the revised content for the next meeting of the entire staff. They were again involved in choosing the size of the chart and materials to be used to construct it. They determined that elderly people need larger print than the usual typewritten content and they suggested appropriate pictures to be taken to illustrate services and daily routines of the Nursing Home. As their ideas were incorporated, snapshot pictures were taken by the Activities Director. Individually or in groups, the staff were asked to make selections and to suggest the kinds of pertinent information which would benefit family members. They also proposed enlargement of some of the pictures for easier viewing by the residents. As we progressed in the development of the tool, relatives who were visiting in the Nursing Home evaluated the content and the impact of the various sections in the completed dummy model. Content format of the flip-chart includes the admission information, routines of the day, the activities schedule for the week, available services (including nursing, medical, dental, pharmacy, dietitian, physical and occupational therapy and social services), and helpful hints in dealing with sensory deprivation problems associated with aging. Staff decided that a single page fact sheet handout would be useful and insisted that the language be simple, basic and understandable to their

clientele. It was the role of the Project Coordinator to ask appropriate questions, to help to organize the material into a logical sequence, and to prepare the material to be assembled into an appropriate tool.

We field tested the partially completed Orientation Flip-Chart and a copy of the Fact Sheet handout at a Western Branch of the American Public Health Association workshop on patient/family education in long-term care facilities, which was held in Cheyenne, Wyoming, in mid-May. Representatives from western states with comparable size nursing home facilities felt that this kind of simplistic, low-cost tool had a potential for patient and family learning. They commented that it could be used to relieve anxiety and reinforce information which was mentioned in an emotional situation, that of arranging for placement of a family member for long-term care. Their enthusiasm for development of comparable materials leads us to include the Fact Sheet as an Appendix item to this Final Report. Most of its content is also included on the pages of the orientation tool.

Preoperative Teaching Manual

The same procedure was followed in preparation of the content of the Pre-Op Tips Flip-Chart developed in the urban hospital for sharing in the rural hospitals. It was the hospital staff's decision to use more advertisements from professional magazines to illustrate the concepts in order not to mislead local patients about services or equipment which was unavailable in a 16 bed hospital. Nursing staff, including the Director of Nursing Service, volunteered information to meet the needs of patients for orientation to surgical procedures and care of emergencies which were involved in routines for nursing care, diagnosis, and therapy. A few pictures were taken of local staff to personalize the flip-chart to the local hospital. Discharge instructions related to the services which are available locally and, in addition, the consultant staff resources were also identified.

Evaluation

It is our feeling that the staff of both the Hospital and Nursing Home have had too little time in the past four months to incorporate the concepts offered in initiating patient and family learning in a small rural agency. Their enthusiasm and their concern for learning has been rewarding. The Nursing Home Supervisor is a key leader, and she is in the agency each morning until noon Monday through Friday. The Activities Director is well prepared and motivated to involve residents not only in activities in the Nursing Home, but provides contact with the community. She arranges tours to Senior Citizens Centers and other community functions and arranges with community, church and civic groups to participate in Nursing Home activities.

Carbon County Memorial Hospital and Nursing Home

The 1974 estimated population of Carbon County is 7,900 in a land area of 2,066 square miles. Red Lodge, the County Seat, is a ski resort town in the winter and is a gateway to the Cook City entrance to Yellowstone National Park. It is a vacation area located in the southern Beartooth Mountains and is sixty-three miles southwest of Billings. The combined hospital and nursing home is

an affiliate of the Lutheran Hospital and Homes Society, as is the agency in Hardin. The bed capacity of the Hospital is twenty-four and the nursing home component has twenty-nine beds. It is licensed by the State for skilled and intermediate care, but does not participate in Title 19 funding. A new Careage Corporation nursing home of approximately 80 beds will be ready for occupancy in early summer.

Our first visit to Carbon Memorial Hospital and Nursing Home was arranged for the last week of February. The Project Coordinator explained the Project and offered sharing of services which had been effective at Columbus and in Billings. The Administrator and Nursing Service Director were very interested. However, the nursing staff were involved in weekly staff development sessions for care of critically ill patients, a lecture course offered by a local physician, which would continue into the spring. It involved both R.N. and L.P.N. personnel, because nursing staff are assigned to either the Hospital or the Nursing Home section. The R.N. team leader assumes professional responsibility for the nursing care and consults with or directs the L.P.N.'s and aides in the Nursing Home as necessary.

They accepted the Breast Self-Examination Flip-Chart with enthusiasm. Examples of the tools which had been developed and descriptions of the methods whereby we had shared services initiated discussion of what might be most effective in their area. The Administrator shared duplicate copies of hospital magazines from which advertisement cut-outs could be used to prepare a preoperative flip-chart for patient and family teaching in the Hospital.

The Director of Nurses suggested that a similar tool might meet the needs of staff to identify patient coping behaviors and form a ready reference for nurses to help the aides and other hospital personnel to develop appropriate approaches to deal more effectively with them.

We explored possible areas for their involvement based on local needs. The Director of Nursing Service volunteered to verify needs of the nursing and dietary staff for patient teaching based on the outlined capabilities of the Project and the patient population. The Coordinator continued to communicate by telephone and letter to keep the agency informed of developments with the other rural projects in Columbus and Hardin.

Staff Development

After a slow beginning with a number of communications about activities in the other areas, the program in Carbon County began late in April. Some inservice programs which had been successful in Hardin were duplicated in Red Lodge, since the modified nominal group process identified areas of comparable need. The staff aides were encouraged to find ways to spend more time with individual residents in the Nursing Home and were commended on the warm, caring, listening attitudes they displayed. The Nursing Home does not offer physical or occupational therapist services, therefore it is the staff responsibility to involve residents in these activities. The rationale for maintenance of joint action through Range of Motion exercises during usual daily procedures and in established schedules for walking patients on a routine basis was stressed.

CONCLUSIONS AND RECOMMENDATIONS

Myocardial Infarction Patient/Family Teaching Program

The conclusions and recommendations of this Program are on pages 19 through 21. This was the priority area for sharing services between the urban hospitals and with the first rural hospital (Columbus) to be involved in the Project. Logical sequence warranted placement at the end of that section to complete this report.

Preoperative Patient Teaching

Informal evaluative statements by parents, staff, nursing faculty and students expressed positive, enthusiastic acceptance of the preoperative patient and family teaching program. Nursing students found the adolescent pre-op flip-chart to be an effective tool in planning patient care and in teaching young people. They allowed the adolescent and pre-teen to read the chart and then went back in to talk about understanding, clarification, and need for reinforcement. Two anesthesiologists asked for the charts and took them into the room to talk with children, youth and parents about anesthesia. The reaction to the box of visual aids is likewise positive. The newly assigned Head Nurse at St. Vincent's expressed a feeling that the children appeared to be less apprehensive than during her previous assignment to pediatrics several years ago. However, although we cannot specifically state that the pre-op patient teaching program is responsible, we do feel that it is a contributor with overall Montana State University-St. Vincent's project to reduce anxieties related to hospitalization of children and youth.

The development of tools which involve the patient and family in the learning experience by means of simple, single-concept methods has stimulated representatives of the urban hospitals to seek other groups of patients who could benefit from comparable approaches. The physical therapist is beginning to develop a similar program for the stroke patient. Medical staff nurses are seeking a way to orient the patient in greater depth to the various diagnostic studies of the laboratory, as well as the x-ray department.

We conclude that this is a valid teaching method to allow the patient and family to verify knowledge, recognize misconceptions, and to allay anxieties.

Joint Implant Surgery

We learned that it is essential at the very beginning to involve more than one or two physicians in a patient and family teaching program which relates to a specialized regimen. The fact that procedures vary among individuals of the same specialty area makes it crucial to assist patients on an individual basis, even though they can benefit from generalized information.

The education program for patients with orthopedic implants was a low priority item for the Project. Had we had more time to spend in implementation of family teaching in this area, our efforts would have been directed toward

increasing the teaching skills of all nursing personnel on the orthopedic divisions to assure the use of adult education methods in the learning process. Furthermore, we would have provided opportunities to improve interviewing skills to verify, through feedback, the patient's misconceptions, areas of concern, and needs for learning so that they would be able to effectively cooperate in the plan of care. The highly technical implant devices are discussed in detail by the surgeon with the patient and family. However, the average person, especially in the age group which most often requires this type of surgery, is not as knowledgeable about body structure and functions as are younger persons who have been exposed through the media and school experiences to a more extensive educational base in matters of health. An added constraint is the patient's reluctance to take more of the busy surgeon's time. Furthermore, the patient may not realize a lack of understanding, because he depends on his own past life experiences and family habit patterns for interpretation and assimilation of an entirely new concept. We found this to be true when the Project Coordinator offered the tool to a brother-in-law who had recently had knee implant surgery performed in another State. Both he and his wife volunteered information that the surgeon had spent a great deal of time in explanation, but they had not realized some misconceptions until they read the content and viewed the illustrations in the flip-chart. In addition, a friend in the same city used the tool to orient herself in order to help interpret the procedure of care to a 60 year old sister-in-law whose second knee implant was scheduled for the following week in still another metropolitan area. Both families expressed feeling less anxious and that they had a greater understanding of the rationale of the therapeutic regimen. While visiting with them, the Project Coordinator was able to verify these observations by exploring their knowledge and observing their ability to demonstrate actions.

Expansion to Rural Hospitals with Affiliated Nursing Homes

It has been stated by Marion Ulrich, a Health Educator with United Hospitals, Incorporated in St. Paul, Minnesota, that it takes a minimum of nine months to develop a patient/family learning program in a metropolitan medical center. It follows, then, that at least a year would be logical in a rural area without the medical school millieu and in a State where resources are limited.

The staff members in charge of the small nursing homes during the supervisor's absence are licensed practical nurses. If the nursing home is an affiliate of a hospital, the registered nurse team leader of the hospital section is available during each shift over a 24 hour period for consultation and judgement about nursing care and learning problems. Although the nursing administrative personnel of the two small rural agencies have attended a number of management workshops offered in the region, no one from the staff of these agencies has participated in the teaching-learning process workshops offered by Montana State University through Continuing Nursing Education. The last series was in progress before the beginning of the six-month's extension of the Patient and Family Education Project to small hospitals with nursing home affiliates. The Project made a greater impact in Stillwater County where more opportunities for sharing learning experiences existed and the staff participated for a longer time.

As the usual employee turnover which occurs at vacations and terminations changes the composition of the staff, it will probably dilute the learning climate which presently exists. We have attempted to provide them with information about resource persons and avenues for continuation of what has been started, but it will depend on their own motivation and willingness to incorporate the practice into regular routines of each agency.

A logical conclusion offered by this experience is that a six-months period of time is inadequate to work in a rural western hospital and nursing home if a Project is to achieve a measure of success in relation to cost. The delay inherent in beginning a new project where routines and activities are an accepted practice and changes are threatening is only one factor to consider. The rationale for this observation is based on sound educational methodology.

The travel involved is time consuming. However, to station an educator in each institution is impractical because of the size of the rural agencies. The staff assignments are related to control of costs and to fulfill specific needs for care of the patients or residents. Although fifty to sixty miles is not a great distance, the environment for achieving learning goals is almost eons apart from a larger teaching-learning center. Involvement in the educational teaching-learning process is almost like a foriegn atmosphere for most adult learners and teachers in these areas. All the references to constraints which were expressed in the earlier portions of this report relate even more critically to the need to use educational methodology and expertise in how to help patients and families in rural areas to use the process to learn effectively.

We recommend to the Nursing Home Association and/or the Department of Hospital and Medical Facilities of the State Department of Health and Environmental Sciences that a program in the teaching-learning process be required of appropriate nursing home personnel responsible for patient and family learning.

Sharing in Other Areas in a Rural State

The news item about the Health Education for Patients and Families Project in the Billings area which appeared in Montana Health Planning News, Volume I, Number 5 -- March-April, 1976, initiated many inquiries and requests for materials both within the State and from as far away as the Chicago Headquarters of the American Medical Association. Letters asked for quarterly reports, of which we didn't have extra copies nor was funding available to duplicate copies. Physicians, nurses, clinics, local health department staff, hospitals and nursing homes requested copies of some or all of the tools which had been prepared. Again, these were not available in quantity. Furthermore, they were developed to meet the needs of the local situations.

We recommend that funding be made available from some source to allow a consultant to work with personnel in local areas to provide for a series of workshops with interim project assignments in order to assist agencies in rural areas to learn to use the process in developing programs of patient and family learning.

We further recommend that the materials prepared through the local Project be placed in the District 6 Health Care Learning Center and be available for

loan to nursing homes as well as hospital members of the local District. The Project Secretary prepared posters and other visual aids required for staff development and to illustrate learning concepts. In addition, a copy of each flip-chart and the M.I. Teaching Manual were retained in the office for reference and for sharing the process of development of the programs.

Final Comments

Initially, it was hoped that the Project for sharing could be supported in the area jointly by the urban hospitals. However, all hospitals in District 6 Montana Hospital Association support the Health Care Learning Center by very extensive donations of money and services. It would be impossible to undertake another added expense at this time. Each urban hospital is beginning the development of their own patient education coordination. We recommend that the District 6 Health Care Learning Center explore funding to continue the process of sharing health education services.

As the original Project drew to a close, we felt that there was much to do in the area of risk factors for the myocardial infarction patient. We requested additional funding for a concerted effort, especially toward hypertension. We were planning a more complete follow-up through survey of hospital surgical patients with elevated blood pressure. We also planned to initiate interviews with discharged myocardial infarction patients. This was to be in addition to the initial home visit by the public health nursing staff.

We were granted an extension of six months, making the duration of the total Project two years in length. However, the change in focus created by the addition of three rural hospitals with nursing home affiliates eliminated any possible activities in the areas of risk factors. The Project Coordinator was forced to begin to establish relationship with an entirely new environment and a different group of workers, not only in one area, but in three!

Fortunately, perhaps, we were only able to touch base with two new agencies. That we helped them to be more aware of patient teaching is undoubtedly true, but the time and funding for implementation and for the very difficult task of changing behaviors ran out on June 29th.

The urban hospitals and the Hospital and Convalescent Care Center in Stillwater County, on the other hand, are moving ahead and there is evidence that they are sharing programs and concerns about more effective patient and family teaching and learning. We were disappointed that the Project was unable to develop a program for sharing requested by all the rural nursing homes and hospitals. There was insufficient time to complete the process required for an effective program for staff to recognize the patient's coping mechanisms and learn appropriate approaches to help the patient and family members to deal with them.

APPENDICES

General Instructions for all patients on the day before surgery or treatment:

When Teaching is Completed:	Directions/Content	Comments & Examples
1. Child verbalizes meaning of "fasting after bedtime and in A.M." - tells why he won't eat or drink.	Fasting after bedtime and in A.M.	Tag on bed that says "Nothing by mouth or NPO." You may feel hungry or thirsty. We do this so that your stomach (tummy) will not be upset when we give you medicine before your operation.
2. Child cooperates with staff while personal care is given - bath; tooth brush - hospital gown - older child verbalizes reason for skin prep and need to keep area sterile.	Explain bath - makes skin very clean.	Bath in a.m. and/or before sleep.
3. Child tours department - knows where elevator is. Explain that the operating room is one floor above the Pediatric floor.	Explain transportation to operating room in his own bed or stretcher. Parents can go to the elevator.	Allow child a choice of favorite toy or blanket to bring along. Secure it to the bed. It should be appropriate for age and labeled; inspected by RN.
4. Child handles a mask, O.R. gown, cap and gloves. The staff assists child with role playing or use of doll, or allows self-play. If child asks, allow handling of I.V. tubing.	Describe attire of anesthesia and operating room personnel.	"On the way, if you are not asleep, you will probably see doctors and nurses in bluish caps, masks and gowns. Did you ever see someone wearing a mask? Here they are used to keep others from catching a cold, if anyone has a cold." Most young children associate masks with "bad guys" or games, so it is important to explain their use.
5. Child verbalizes the difference in going to sleep by medication with the help of a doctor from going to sleep at night at home.	Explain anesthesia - patient will not be awake because he will be given a sweet smelling medicine by mask over the nose and mouth (modify for intravenous anesthesia); that he	Many children show preoccupation with waking during the operation, or disbelief that they will not feel pain. Reassure child that there is a special doctor whose

When Teaching is Completed:	Directions/Content	Comments & Examples
5. (continued)	will not feel or remember the operation. Describe the mask.	entire job is to see to it that the mask is kept in place and that everything goes well. It is difficult to avoid the word "sleep" in describing anesthesia. Thus it is important to differentiate between sleep induced by medication and nighttime sleep, in order to avoid later problems around bedtime. Some children become fearful that other procedures will take place when they are asleep at night.
6. Child views pictures of recovery room/operating room if appropriate and verbalizes that he will awaken in Recovery Room and then return to his own room.	Introduce Recovery Room. Indicate that he will not return to his room directly but will go to the Recovery Room until he is fully awake. Explain that the people working in Recovery Room are trained especially to take care of patients who have just had operations.	Describe attire of staff and the number of other patients there; will wake up in a bed.
7. Child verbalizes location of pain and tells that medicine is available that will relieve his pain.	Discuss pain and its relief.	"After the operation, you may feel uncomfortable (feel pain or some hurt). The pain will mean that the operation is over and that your body is sore. We know how to take care of hurting with medicine. We usually know when you need it, or you can tell us when you need it." Go into routes (hypo or oral) of administration of medicine only if child expresses the desire to know. Give support.
8. Child verbalizes his knowledge about operation and/or procedure and displays clues	Evaluate what child knows about his surgery. "What did the doctor tell you about your operation?" Repeat	When explaining anything to the child, remember his age. At this point only tell him where the

When Teaching is Completed:	Directions/Content	Comments & Examples
8. (continued) to staff.	information. Encourage questions and verify.	operation (incision) will be; where the pain will be; reinforce the use of medicine for pain again.
9. Child verbalizes his feelings about the pre-op shots.	Explain pre-operative medication that he will be receiving -- that one or two "shots" will make him drowsy and get him ready for the operation.	This aspect is covered at the end of the session because it is exciting for the child. We want to be assured of the child's attention to the preceding material. Parents may be with child. At this time, safely demonstrate syringe play or use of masks. Encourage participation.

10. ON THE DAY OF SURGERY:

- Encourage and answer all questions.
- Encourage parents to be present, if possible, for support.
- Explain pre-op medication and its necessity.
- Let parents walk to elevator with patient.
- Inform parents of location of waiting room on Pediatric or Surgical floor (except parents of Dr. B_____'s and Dr. H_____'s patients, who wait in 5 E surgery waiting room) or as other doctors may request.
- Ask parents to let staff know where they can be located.

ALL STAFF HAS RESPONSIBILITY FOR PRE-OP TEACHING. If there are questions or problems which come up, check with the team leader or an L.P.N. assigned to preoperative care.

ACTIVITIES:

Mrs. Mary Brown is the Activities Director. Please let us know of hobbies and special interests to encourage your family member.

CONSULTANTS:

A dentist is available as needed. Residents are taken to his office, or he comes to the Nursing Home when necessary.

Pharmacist (Druggist) - comes three times each week to bring refills or new prescriptions and to check or give information about medicines.

Occupational Therapist - comes once a month to select and supervise activities to help residents correct or overcome particular disabilities.

Physical Therapist - comes once a month to supervise joint and muscle exercises and make the changes as needed for the residents.

The Social Worker - meets with doctors and nurses every three months to evaluate the status of care needed by residents whose bills are paid by Federal or State Government.

This nursing home is licensed for skilled bedside care only. When residents get better and are able to help themselves, they must be transferred to a nursing home giving less nursing care. This applies to only those residents who are under government pay programs.

LOOSE CHANGE:

We prefer that no money be left in the rooms. A $25.00 deposit from Social Security checks is kept in the business office to pay for personal shopping needs.

COB:PRY
HRA 106-74-178

Project: Health Education for Patients and Families

BIG HORN COUNTY MEMORIAL HOSPITAL AND NURSING HOME...

ADDRESS:

17 North Miles Avenue
Hardin, Montana 59034

Phone: 665-2310

Russell Baker, Administrator
Barbara Childress, R.N., Director of Nursing
Gay Steele, R.N., Supervisor

IT WOULD BE HELPFUL TO BRING THE FOLLOWING:

Clothing for Women -	4 dresses; 4 slips; underwear (Laundry washable that won't fade) At least 1 or 2 housecoats & nightgowns 6 pairs stockings - garterbelt preferred 2 sweaters; jewelry; scarves; etc. Slippers, but walk better in shoes (2 pr.) Outdoor clothing - coat; overshoes; etc.
Clothing for Men -	4 pair pants and 4 shirts Shorts and underwear as desired 6 pair socks - slippers/shoes (2 pr.) Outdoor clothing - coat; overshoes; etc. Sweater
	Nursing Home does have gowns, robes and slippers and provides lap robes.
Other Useful Items -	Hairbrush and comb - Makeup Lotions or hand creams as you wish (Hospital Lotion is provided) Toothbrush, tooth paste, denture cleansers Electric razor, if you have one Kleenex (handkerchiefs get lost in wash) Hearing aid batteries - clock
	We don't use bath powder; it dries the skin.
Aids to Walking -	We find a walker is best when people need help. Bring a cane or crutches if you use them, or a walker if you have one. The Nursing Home has some walkers.

Please have all personal belongings marked with a special marking pencil so they can be easily identified.

We are sorry that we don't have the room for your own furniture. Do bring family pictures and other favorite things if you wish.

Don't hesitate to ask questions about anything that we haven't made clear.

Residents can receive phone calls and/or Staff will help place calls for them.

NUTRITION:

Proper food is as important as medicine to the older or ill person. Once each month, our consultant dietitian comes to check the diets, to recommend changes, plan menus or to solve problems of food and eating.

If you wish to share a favorite food or special treat from home, we'd like you to ask the charge nurse about it first. Then we can work it into the diet the doctor has ordered. The same is true of beverages which may interfere with the needed medicines.

A birthday party is held once a month. The kitchen bakes a cake. Dietetic cakes are provided for diabetics or those who need to lose weight.

If a resident needs help to eat, relatives and friends are welcome to come at mealtimes to assist those who can't feed themselves.

WE ENCOURAGE VISITING AT ANY TIME.

The quiet room is a private place for families to visit or for residents to be alone for a while. When the days are warm, the screened patio is nice.

We encourage relatives to take residents out to dinner and for rides unless the doctor feels it is not wise.

MEDICAL OR NURSING CARE:

Mrs. Gay Steele, R.N., is Supervisor of the Nursing Home. She works mornings Monday through Friday. Her home phone number is 665-2212, if you wish to call her.

Licensed Practical Nurses are on duty around the clock and Registered Nurses from the Hospital are available on a 24-hour basis.

Doctors see all residents at a minimum of once a month, and are called whenever they are needed.